Canadian Transport Commission
Western Division

Commission canadienne des transports
Division de l'Ouest

Report of the Inquiry

into Railway Branch Lines

Mr. Commissioner J.M. McDonough
Chairman

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June 28, 1985

Canada

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INTRODUCTION

It is a well-known economic maxim that rational people will choose the lowest cost alternative to accomplish their needs. However, access to comprehensive information on available alternatives and the unrestricted freedom to exercise the optimum choice are essential for this proposition to materialize into tangible benefits. Therein lies the central theme of our approach to the future of Government involvement in the handling of railway branch lines.

Freedom of informed choice fosters competition and thereby results in lower prices for goods and services. Government policy pertaining to any sector of the economy or to the activities therein should encourage this principle for the well-being of the producing, consuming, and serving entities that comprise the economy as a whole. This thinking should apply to national transportation policy and to specific policies and programs related to segments of the transportation industry. Unfortunately, this ideal has not and does not necessarily exist in all circumstances surrounding the branch lines of the Canadian railway system. Rather, inefficiency and cost-ineffectiveness seem to have been institutionalized through the direct and indirect subsidies effectively granted as a monopoly to the main line railways — a rigidity we feel should be reduced.

Railway branch lines provide a service to shippers and consignees which could be characterized as a "feeder" service to and from the branch lines' junction(s) with the primary or secondary main lines of the railway network. That service is physically and economically distinct from the predominantly long-haul, high density, "through traffic" services on the main lines. Whether the Government objective is to ensure low costs, fair prices, and/or efficient service in the transportation sector, policies with respect to branch lines should promote a maximization of user choice of <u>all</u> available "feeder" services, in full knowledge of the direct and indirect physical and economic implications of each choice. Under such a policy, Government could assist the user with a minimum of direct or artificial intervention.

Although this type of policy could not be categorized strictly as deregulation, it would reduce the "Big Brother" syndrome and increase what could be labelled as auto-regulation — a principle perhaps intended under the existing National Transportation Policy which, for a number of reasons, has not been fully realized. Such a policy, however, would also require substantive changes to the legislation pertaining to branch line abandonment, the related criteria as to who is eligible for direct or indirect subsidy and under what conditions subsidy should be granted.

One of the basic problems with any policy, fixed at a certain period in time in accordance with the current circumstances and with the expectations for the future, is the unforeseen changes that occur and the impact of those changes on the applicability of the policy in a new environment. Programs, put in place at different times during the policy's life, tend to laminate with the combined result being something other than was originally intended. These programs generally result from interpretations of inflexible legislation and these interpretations tend to vary over time as a result of Government bodies attempting to respond to the changing needs of the subject sector(s) of the economy. With time, these initiatives tend to become more and more "band-aid" solutions to bigger and more obscured problems, if appropriate overall legislative review is not made to compensate for change — and such reviews are of necessity infrequent. If those programs involve intervention by Government, the environment so created often is viewed by transportation users not to be artificial but rather the result of a natural evolution. Indeed, some consider these programs to be sacred. Government proposals for program change could therefore be perceived to be yet further Government intervention, even though such change may be necessary to delaminate the synthetic creations of past Government policies and programs that are no longer cost-effective. Therein lies one of the basic problems we face when considering alteration of the way in which Government deals with railway branch lines, in the future.

The history of Government intervention, through financial assistance, directly or indirectly to the railways or for select traffic movements, or through a variety of economic regulations, has been justified,

by and large, on the basis of a perceived need to protect the user from the potentially monopolistic actions of the railway carriers and/or to improve the economic viability of particular users, the carriers, segments of the economy or geographic regions. The long term maintenance of the Crow Rate for western grain — the railway losses of which were compensated, in part, by a program of branch line subsidies, purchase of Government grain hopper cars and funding branch line rehabilitation — is a classical example of financial assistance intended for the Prairie grain producer supplied by Government to the main line railways. Another example, is the subsidy of traffic movements (mostly in Eastern Canada and British Columbia) originating or terminating on "uneconomic", non-grain dependent branch lines, which in many ways, is a form of regional development assistance to those who just happen to be located close to an uneconomic branch line. The criteria for eligibility of branch lines to receive these subsidies, the allocative costing methods for subsidy determination, the extent of the subsidies beyond the branch line trackage, Government purchased grain hopper cars, and branch line rehabilitation, all at public expense, are subjects which were developed in different times and under different circumstances, and now are programs that we must seriously reconsider.

The development of the Western Grain Transportation Act (WGTA) has replaced the situation arising from the Crow Rate with a hybrid subsidy for the movement of western grain, whereby, the Government subsidy has increased more than two-fold and the grain producers' cost of transportation will also increase substantially over time. As a result, the revenue received by the railways is more attuned to what a commercial railway grain rate might otherwise be. The other grain transportation related assistance programs, developed pre-WGTA, still remain, as does the subsidization of non-grain dependent branch line traffic movement. We therefore see the need for a review of these programs as being augmented, in light of current reality.

The current reality is that there are several alternatives to the conventional main line railway-operated branch line feeder systems. For example, analysis of the branch line-specific costs of service indicates that, in a relatively large number of instances, trucking operations from

offline elevators have potential to be more cost effective than the branch lines now operated by the main line railway carriers. Conventional short line railway operations appear to have some limited, but certainly not widespread potential, to improve the capacity, efficiency, effectiveness and reliability of the overall transportation system. Technological innovations in railway power units for branch line use — particularly road/rail power units — appear to hold promise of reduced branch line or short line costs and, hence, lower levels of subsidy. Such innovations nevertheless require experimental assessment before irreversable action can be recommended.

More specifically, in a number of areas on the Prairies, trucking from offline elevators directly to the closest delivery point on economic track could result in a lower total cost than the cost of the main line carrier operated branch line to the same delivery point. This saving is even more significant if the deferred cost of planned Prairie branch line rehabilitation is included as a cost attributable to the movement of the grain from the branch lines to be rehabilitated and as a cost avoided as a result of such trucking. Offline elevator-trucking cost savings also materialize from the resultant ability to increase grain car loadings for the offline haul to port. There are, however, indirect costs related to a shift to trucking, including the possibility, in some areas and for certain road surfaces, of incremental road maintenance costs to municipalities and Provinces, and the loss of local railway-derived property tax. The order of magnitude of the related savings, associated with the alternatives to the current operation of certain branch lines, by main line carriers, could nevertheless be more than ample to compensate for these indirect costs potentially leaving a significant savings in current subsidies. Concrete cost comparisons require in-depth site-specific investigations of all of these factors and, as a result, it is not possible to make sweeping generalizations that offline elevator trucking is universally cheaper than conventional branch line operations.

With respect to the comment that inefficiencies have been institutionalized, it is worthy to note that the protection of a basic branch line network may be counter productive. Another system to ensure low risk

elevator investment, preservation of the equality of access to rail, and other arguments for wholesale retention may now be warranted. It appears that a move from enshrining a system of branch lines to a more flexible system of ensuring criteria and standards for abandonment, in consideration of the cost-benefits of alternative feeder systems, may be equally acceptable but at a much lower resultant cost to Government and the branch line user.

In Eastern Canada and British Columbia, branch line unit costs (¢/ton-mile) are extremely high, relative to Prairie branch line unit costs. The subsidies for many of these lines appears to be an inordinate subsidy for the movement of goods over short distances. There is very strong evidence to support the contention that other feeder options may be more cost effective and warranted in the future in respect of such branch lines. As well, there are indications, but no proof, that the CTC method of cost and loss determination for branch lines is too generous. Because of this, there appears to be merit in reviewing standards and not only the criteria of abandonment and retention and hence subsidy, but also the costing and loss criteria employed by the Commission through Order R-6313 and the interpretations thereof and of related legislation in the Railway Act.

Although the above is a result of careful analysis of data and opinions available to the Commission and this Inquiry, very little of the data is available to the users of the branch lines in question. As a result, opinions as to what is and what is not needed and the attractiveness of alternatives are perhaps distorted in the eyes not only of the branch line user but perhaps also of the grain companies, Provincial and Federal Government Agencies and other interested parties. For example, under the WGTA, the costs of Prairie branch lines are obscured. The WGTA rate paid for branch line service is generally much less than the line-specific costs, often by an order of magnitude. Even if branch line costs were known and thereby an option to conventional branch line operation might be found to be more cost effective, there is no mechanism in place to respond to a desire of users to opt for the lower cost alternative feeder services. Neither is there a mechanism for those alternative services to compete fairly for the provision of feeder services nor for a portion of the direct or indirect

subsidy that is now paid to the main line railways for those services. Indeed we believe these mechanisms should be created.

The Government pays subsidies, directly or indirectly for the feeder services provided by the main line carriers on their branch lines because many of those branch lines have been or are deemed to be uneconomic and the railways would allegedly abandon them if no Government assistance was forthcoming. In a way, those subsidies are not railway subsidies but financial assistance to those shippers who use the branch lines. In theory, the user should not care whether the feeder service to railhead is by railway branch line as long as the total rate to destination is the same as if the branch line were employed. Yet those subsidies are restricted, at present, to the main line railways. They are not available to alternative and potentially available feeder services such as short line operators, truckers or offline elevator operations — even though those alternative feeder systems may offer the lower total costs. In other words, there is no way for lower cost services to compete for the subsidies paid to the main line carriers to assist the users. The main line carriers hold a reluctant monopoly on these Government funds, whether administered through the provisions of the Western Grain Transportation Act for grain-dependent branch lines or through the Railway Act for non-grain dependent branch lines. This situation therefore further institutionalizes inefficiency and restricts the goal of lowest total costs and best utilization of all available modes and therefore should be changed.

The existing direct and indirect branch line subsidy schemes provide little reason for those located nearby an uneconomic branch line to consider the cost effectiveness of the main line carrier's branch line service. The user does not pay the real cost— nor does the user know what that cost really is. In theory, the main line carrier has little apparent incentive to improve independently the cost effectiveness or efficiency of the branch line operation as there is no profit in doing so. For example, in the Prairies, there appears to be no incentive for the main line railways to be cost effective or efficient under WGTA, as the WGTA is a cost based plus contribution payment scheme. The more it costs, the more is paid. As well,

in a number of instances in Eastern Canada and British Columbia, experience shows that users tend to argue for subsidized branch line retention to keep truck rates low — a distorted type of competitive pressure that should not be permitted to remain.

For the above reasons, the WGTA and the associated indirect grain dependent branch line subsidy/assistance programs, as well as the non-grain dependent branch line subsidy programs, tend to restrict competition — perhaps unfairly. It is the related distortion of the competitive footing of each available alternative mode and operator that restricts competition from being an effective cost reducer. This occurred even when the existing National Transportation Policy was created, in part, to herald the recognition of inter and intra modal competition and to permit it to thrive in a more natural way than was prevalent pre-1967. We believe this apparent conflict should be rationalized.

Moreover, there are known to be several technological and operational innovations that could improve the viability of branch line operations. There are, as well, several innovative ideas that, while not directly associated with transportation, could potentially result in transportation cost savings. There is, however, little or no incentive under current policies to initiate or test these concepts. We believe a mechanism should therefore be established to consider such matters in association with branch line abandonment proceedings.

Furthermore, those shippers in frontier regions of Canada, where no railway branch line exists, are precluded from the benefits afforded those located in more developed areas, as subsidies are restricted to railways. In order to maintain the principle of equality of treatment, consideration should be given to assist those shippers through non-rail feeder subsidies.

Irrespective of the detailed supporting evidence for the above suggestions (and there is a significant body of evidence), a logic evolves, which appears to stand on its own. This logic suggests the need for mechanisms which would not only provide the necessary physical and economic

information to the branch line user, so that the user could make knowledgable choices, but would also provide an ability for non-main line carriers to compete for the provision of feeder services and the direct and indirect branch line subsidies, now paid exclusively to the main line carriers. These mechanisms would not support rigorous legislation to force Government-determined "best solutions" on users — something that current attitudes do not support. Such mechanisms would not result in higher service price to the user but lower service cost - hence lower subsidy requirements paid from the public purse. They afford quick response to the self-determined conclusions and requirements of the user. They are reactive. After all, just as transportation is a service industry which should respond to the needs of its clients, related policies, programs and procedures should be so-administered. Our recommendations will center on these mechanisms.

Acknowledgements

We wish to express our sincere appreciation to all those individuals, associations, provincial governments, shippers and transportation companies who have contributed significantly to this report through submissions, correspondence and meetings. As well we thank those who responded to our request for assistance in comprehending some of the complex issues that we have dealt with and without whose contribution and cooperation our mandate would have been much more difficult to fulfill.

Those who made submissions to the Inquiry are listed in Appendix 1. Those who we met with are identified in Appendix 2. To those and the many Commission staff who provided information, analysis and advice, we extend our deep appreciation for their time and effort throughout the time of the inquiry.

Some individuals' contributions merit special acknowledgement. We would particularly like to recognize the contribution of Gary M. McLaughlin, our coordinatior for the inquiry, whose ideas and professional advice contributed significantly to the conclusions of the Inquiry Panel. As well we recognize Lynne Morin, for her research capabilities and assistance, Ken Tikkanen for his professional engineering advice and railway experience, Peter Noonan our Legal Advisor and Randy Lebell, Inquiry Secretary. To these staff we offer our sincere thanks for their support and assistance which was in addition to their normal heavy responsibilities.

Senior Commissioner J.M. McDonough
Chairman

Commissioner R.J. Orange

Commissioner D.H. Chapman

CANADA

PRIVY COUNCIL • CONSEIL PRIVÉ

P.C. 1984-4145
20 December, 1984

WHEREAS the Railway Act empowers the Canadian Transport Commission to examine and review applications by a railway company desirous of abandoning the operation of any branch line operated by the company and to make rules for the handling of such applications;

WHEREAS the Governor in Council pursuant to section 258 of the Railway Act may prohibit the abandonment of branch lines subject to certain terms and conditions;

AND WHEREAS it is deemed advisable and in the public interest to explore and pursue the development of innovative options and alternatives to provide improved transportation services to those areas of Canada affected by rail branch line abandonment which will identify the potential of those branch lines in order that the most effective, efficient and reliable rail transportation system will be available at minimum cost.

THEREFORE, HER EXCELLENCY THE GOVERNOR GENERAL IN COUNCIL, on the recommendation of the Minister of Transport, pursuant to section 50 of the National Transportation Act is pleased hereby:

(a) to refer to the Canadian Transport Commission for examination and report the consideration of options and alternatives for rail branch lines affected by abandonment, for the purposes of providing the most effective, efficient and reliable rail transportation system at minimum cost;

...2

(b) to request that the Canadian Transport Commission, through its Western Division, for the purposes of its report, consult on a wide and informal basis, with a view to encouraging new initiatives with respect to branch line operations and for the purposes of ensuring that the best available information and ideas will be secured and incorporated in its report; and

(c) to direct that the said Commission, for the purposes of exercising its exploration and inquiry, be governed by the annexed Terms of Reference and will submit its report to the Governor in Council through the Minister of Transport by June 30, 1985.

CERTIFIED TO BE A TRUE COPY - COPIE CERTIFIÉE CONFORME

Gordon F. Robertson

CLERK OF THE PRIVY COUNCIL - LE GREFFIER DU CONSEIL PRIVÉ

TERMS OF REFERENCE

The CTC Inquiry Mandate is as reproduced below:

TERMS OF REFERENCE

"The Western Division of the Canadian Transport Commission shall inquire into:

A. The potential for short line operations in Canada and specifically, shall, without limiting the generality of the foregoing,

1) Determine whether short line operations would likely lead to an improvement in the capacity, efficiency, effectiveness, and reliability of the overall transportation system, with the ultimate objective of providing the most reliable, effective and efficient service by ensuring that branch lines, as part of Canada's railway plant, are used to their best advantage;

2) Determine the financial and operational implications likely to arise from short line system;

3) List the physical works which would have to be built (and their cost), including any transloading facilities required, in order to achieve efficient, reliable and effective interchange between the main line and short line operations;

4) Estimate the capital expenditures required in order to put short line operations in place, including the purchase of motive power and rolling stock;

5) Describe the service levels which would have to be achieved by such operations, including any infrastructure requirements or modifications;

6) Estimate the time reasonably required to convert from operation by a main line carrier to a short line carrier;

7) Enquire into the appropriate division of the origin-to-destination tolls for each carrier in the operations;

8) *Determine for the branch lines in the Prairie Provinces how such an operation might be affected by or integrated into the aggregate costing and rate provisions of the Western Grain Transportation Act;*

9) *Identify any changes in existing legislation (including regulations) that would be necessary for, or beneficial to, such a multi-carrier approach to the movement of traffic and identify the potential financial implications of such legislative changes; and*

10) *Enumerate such other observations and findings as the Western Division of the Canadian Transport Commission deems useful and relevant in this matter, and which would assist the Government of Canada in assessing the future use of such branch lines.*

B. *The transportation implications of, and the financial and operational requirements of offline elevator operations in Western Canada, including existing online elevator operations affected by rail branch line abandonment, as well as operations in the frontier, such as in the Peace River area.*

C. *The current standards for rehabilitation of branch lines, under the federally-funded Prairie Branch Line Rehabilitation Program, giving special emphasis to options for the selective rehabilitation of lines which could operate efficiently and adequately at different standards; the potential for providing expanded rehabilitation under those standards; and the feasibility of competitive tendering to ensure better value for money spent.*

D. *The movement of grain on those Prairie branch lines affected by rail branch line abandonment by examining the various alternatives to transporting grain from the farmgate to market, including farm trucking, commercial trucking and custom hauling, as well as the potential for the expanded use of joint running rights.*

E. *The maintenance of existing infrastructure, including railway rights of way to facilitate the development of new and innovative rail services."*

1.0 THE CANADIAN BRANCH LINE

1.1 General

The major theme of this inquiry is to consider the future Government involvement in the handling of Canadian railway branch lines.

A railway system comprises trackage which can be classified as main line, secondary main line, branch line, industrial spur, sidings or yard tracks. Surprisingly, it is difficult to make clear-cut distinctions between each of these classifications to everyone's satisfaction. Preliminary discussions with officials having long term railway experience and those involved in "branch line" subsidy payments under the Railway Act, indicate a particular lack of unanimity in discriminating what is and what is not a "branch line". History shows that the criteria to define branch lines, particularly for subsidy eligibility, has changed over time.

There are, of course, obvious cases. One would be a section of track with one extreme being a termination of track and the other extreme being a junction with other trackage -- the operation being the servicing of traffic to and from the junction point. Clearly, the transportation function of this type of trackage is a feeder system — a branch line — with no through traffic.

In other circumstances, the type of track is not so obvious. For instance, trackage truncated by junctions, at both ends, with other trackage, perhaps with through traffic, could be argued not to be a "branch line". It may or may not have originating or terminating traffic. It may service nothing but through traffic. It could be classified as main line or secondary main line, perhaps due to track weight and quality or traffic density, depending on the observer's perspective.

It would seem reasonable to argue that, if the function was primarily to feed traffic to either extreme junction, or from either junction to points on the line, the track is a branch line. If that is not the case,

for instance when the track function is primarily to service through traffic, then it seems reasonable not to classify the track as a branch line. Nevertheless, the definition of a "branch line" is really only a matter of concern when evaluating which track segments are eligible by law for direct or indirect subsidy and which are not.

In the past, a large number of track segments have been determined to be branch lines, sometimes by a number of standards, in the process of determining which sections of track can be subsidized as a result of an application for abandonment and in a determination that such lines are "uneconomic branch lines", but should be retained in the public interest. As well, there have been a number of branch lines that have been declared "protected branch lines" (ie: should not be abandoned until the year 2,000). Other qualifiers to the term branch line in common use include "grain dependent branch line" and "non-grain dependent branch line".

Our basic point here is that the definitions associated with branch line legislation should be made more specific. This, however, we will deal with under the section of this report dealing with legislative change.

From a more descriptive point of view and in the context of current definitions, there are roughly 18,168 miles of branch lines in Canada, or roughly 51% of all (CN plus CP) railway trackage. Of these, approximately 9,929 miles (or 28% of all CN/CP trackage) are directly or indirectly subsidized at public expense. Table 1.1 provides details.

TABLE 1.1
TOTAL MILES OF TRACK IN CANADA
FOR CANADIAN NATIONAL AND CANADIAN PACIFIC
1982

PROTECTED LINES (1)	CNR	CPR	TOTAL
Subsidized (5) main line and secondary main line (3)	-	-	-
Non-subsidized (6) main line and secondary main line	4,081	2,529	6,610
TOTAL main line and secondary main line	4,081	2,529	6,610
Subsidized branch lines	3,547	3,785	7,332
Non-subsidized branch lines	1,950	635	2,585
TOTAL protected branch lines (4)	5,497	4,420	9,917
TOTAL subsidized main, secondary and branch lines	3,547	3,785	7,332
TOTAL non-subsidized main, secondary and branch lines	6,031	3,164	9,195
TOTAL protected lines	9,578	6,949	16,527
UNPROTECTED LINES (2)			
Subsidized main line and secondary main line	-	-	-
Non-subsidized main line and secondary main line	6,850	4,097	10,947
TOTAL main line and secondary main line	6,850	4,097	10,947
Subsidized branch lines	1,687	910	2,597
Non-subsidized branch lines	3,184	2,470	5,654
TOTAL unprotected branch lines	4,871	3,380	8,251
TOTAL subsidized main, secondary and branch lines	1,687	910	2,597
TOTAL non-subsidized main, secondary and branch lines	10,034	6,567	16,601
TOTAL unprotected lines	11,721	7,477	19,198
PROTECTED AND UNPROTECTED LINES			
TOTAL subsidized main and secondary main line	-	-	-
TOTAL non-subsidized main and secondary main line	10,931	6,626	17,557
TOTAL main line and secondary main line	10,931	6,626	17,557
TOTAL subsidized branch lines	5,234	4,695	9,929
TOTAL non-subsidized branch lines	5,134	3,105	8,239
TOTAL branch lines	10,368	7,800	18,168
TOTAL subsidized main, secondary and branch lines	5,234	4,695	9,929
TOTAL non-subsidized main, secondary and branch lines	16,065	9,731	25,796
GRAND TOTAL	21,299	14,426	35,725

Does not include lines abandoned since 1982
(1) Lines guaranteed to the year 2000-Prairie Provinces
(2) All other lines not included in (1)
(3) Major lines with heavy traffic
(4) Branch lines as defined by RTC.
(5) Lines that either have applied for or receive payments by RTC under section 253, 256, 258 in 1982
(6) All other not included in (5)

SOURCE: Commission Records, Railway Timetables

1.2 Historical Uneconomic Branch Line Losses

In 1982, uneconomic branch lines incurred losses of $322 million — $310 million of which was lost on Prairie branch lines. That represented a deficit of about $32,460 per mile of uneconomic branch line (about 9,929 miles) and an average of about $1,004 for every originating and terminating car load on uneconomic branch lines. On another basis, the loss amounted to more than $14.10 per ton of goods/commodities originating and terminating on those branch lines. The losses on CP uneconomic branch lines exceeded those on CN uneconomic branch line ($14.47/ton versus $13.74/ton). Losses on uneconomic Prairie branch lines were far less than on uneconomic non-Prairie branch lines ($13.75/ton versus $38.69/ton). Details are found in Table 1.2.

Perhaps of greater significance is the growth of these losses as reflected by the increase in subsidies since 1971, as shown in Figure 1.1.

Figures 1.2 and 1.3 respectively show trends in subsidies for Prairie branch lines and Non-Prairie branch lines.

1.3 Prairie Branch Line and Grain Related Subsidies

Although the institution of the Western Grain Transportation Act (WGTA) of January 1, 1984, has altered the past subsidy program under the Railway Act for uneconomic Prairie branch lines, compensation for losses on grain dependent branch lines effectively still remains in the realm of Government subsidy insofar as part of the WGTA payments subsidizes the grain-dependent branch line deficits. In the long term, this grain dependent branch line deficit will be increasingly paid by the grain producers, as a whole, as the farmer portion of the WGTA payment increases. The legislative aspects of subsidy determination will be dealt with in detail later. Herein, the objective is to describe the significance of Prairie branch line subsidies in a historical context and to place them in their proper context.

To a large degree, the pre-WGTA branch line subsidy program was related to the operating losses associated with the movement of grain at the

statutory rate prescribed by the Crow's Nest Pass Agreement. Under this agreement, the mileage rate for designated Prairie grain movements was 0.5¢ per ton-mile -- a rate which was allegedly well below the mainline railways' real cost of moving grain in recent times. For these branch lines, and pre-WGTA, it was the fact that the statutory freight rate did not cover branch line costs that made them uneconomic. Branch line subsidies were therefore deemed to be required in the public interest to maintain the branch lines that would otherwise be abandoned.

Table 1.3 shows that, whereas statutory grain and grain products consumed roughly 35% of the railways' work (ton-miles), it generated only about 8% of the railways' total revenue, under the Crow Rate Agreement. However, it must also be remembered that the Government paid the railways a subsidy for grain via the "branch line subsidy" program. In 1982, for instance, this was reported by RTC to be about $279 million. This means that 61.3% of all grain revenues received by CN and CP were provided by the public purse in 1982 (not counting the economic value of Government purchased grain hopper cars and branch line rehabilitation or other Government assistance arising from the Crow Rate deficit).

TABLE 1.2

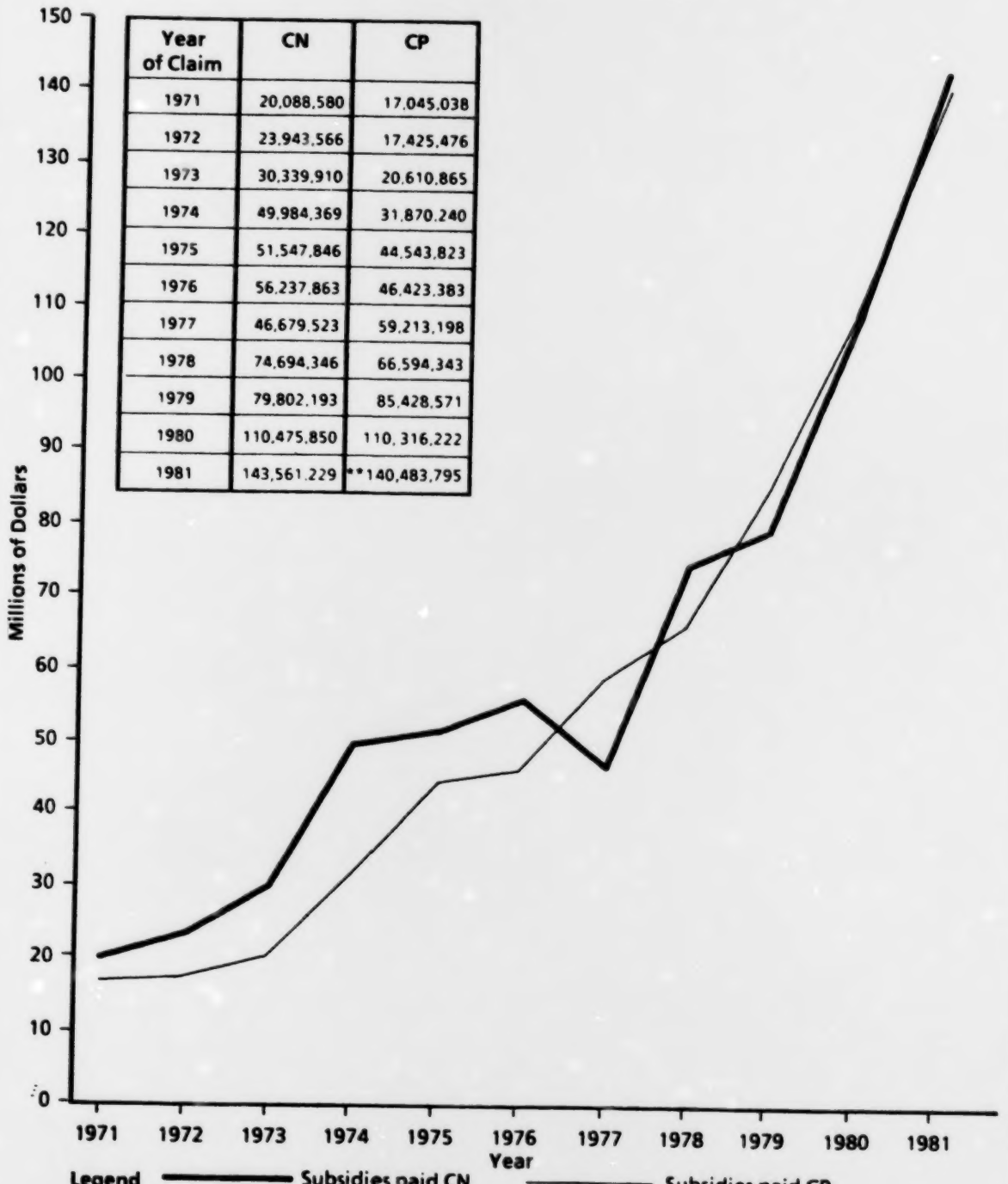
CANADIAN NATIONAL AND CANADIAN PACIFIC
1982 SUMMARY
UNECONOMIC BRANCH LINES

			TOTAL		COST						
	Miles	Cars	Tons (000's)	Grain Tons (000's)	On-Line (000 $)	Off-Line (000 $)	Total (000 $)	Revenue (000 $)	Actual Loss (000 $)	Average Loss/ Car ($)	Average Loss/ Ton ($)
Canadian National											
Prairie	4,378	161,678	11,027	9,753	66,699	174,440	241,139	93,661	147,478	912	13.37
Non-Prairie	856	5,432	272	N/A	10,101	5,113	15,214	7,409	7,805	1,437	28.69
TOTAL	5,234	167,110	11,299	-	76,800	179,553	256,353	101,070	155,283	929	13.74
Canadian Pacific											
Prairie	4,196	152,984	11,494	10,101	72,101	176,528	248,629	86,346	162,283	1,061	14.12
Non-Prairie	499	1,000	52	N/A	5,399	1,074	6,473	1,743	4,730	473	90.96
TOTAL	4,695	153,984	11,546	-	77,500	177,602	255,102	88,089	167,013	1,085	14.47
CN & CP											
Prairie	8,574	314,662	22,521	19,854	138,800	350,968	489,768	180,007	309,761	984	13.75
Non-Prairie	1,355	6,432	324	N/A	15,500	6,187	21,687	9,152	12,535	1,949	38.69
TOTAL	9,929	321,094	22,845	-	154,300	357,155	511,455	189,159	322,296	1,004	14.10

Source: Commission Records

Figure 1.1
SUBSIDIES PAID FOR BRANCH LINES*

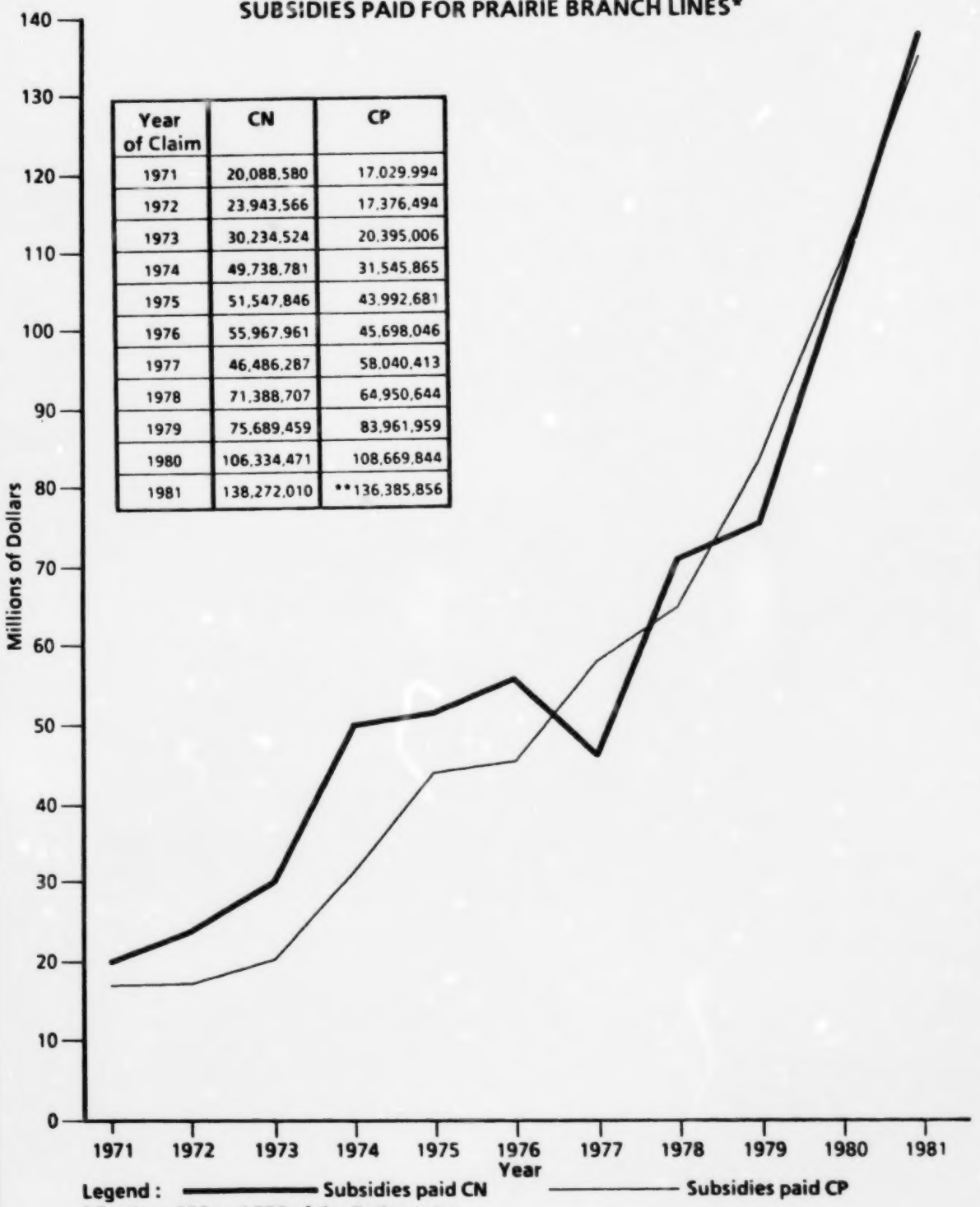
Year of Claim	CN	CP
1971	20,088,580	17,045,038
1972	23,943,566	17,425,476
1973	30,339,910	20,610,865
1974	49,984,369	31,870,240
1975	51,547,846	44,543,823
1976	56,237,863	46,423,383
1977	46,679,523	59,213,198
1978	74,694,346	66,594,343
1979	79,802,193	85,428,571
1980	110,475,850	110,316,222
1981	143,561,229	**140,483,795



*All branch lines under sections 256 and 258 of the *Railway Act*
**Final claim, subject to revision
Source: Canadian Transport Commission,

Figure 1.2
SUBSIDIES PAID FOR PRAIRIE BRANCH LINES*

Year of Claim	CN	CP
1971	20,088,580	17,029,994
1972	23,943,566	17,376,494
1973	30,234,524	20,395,006
1974	49,738,781	31,545,865
1975	51,547,846	43,992,681
1976	55,967,961	45,698,046
1977	46,486,287	58,040,413
1978	71,388,707	64,950,644
1979	75,689,459	83,961,959
1980	106,334,471	108,669,844
1981	138,272,010	**136,385,856



Legend : Subsidies paid CN — Subsidies paid CP

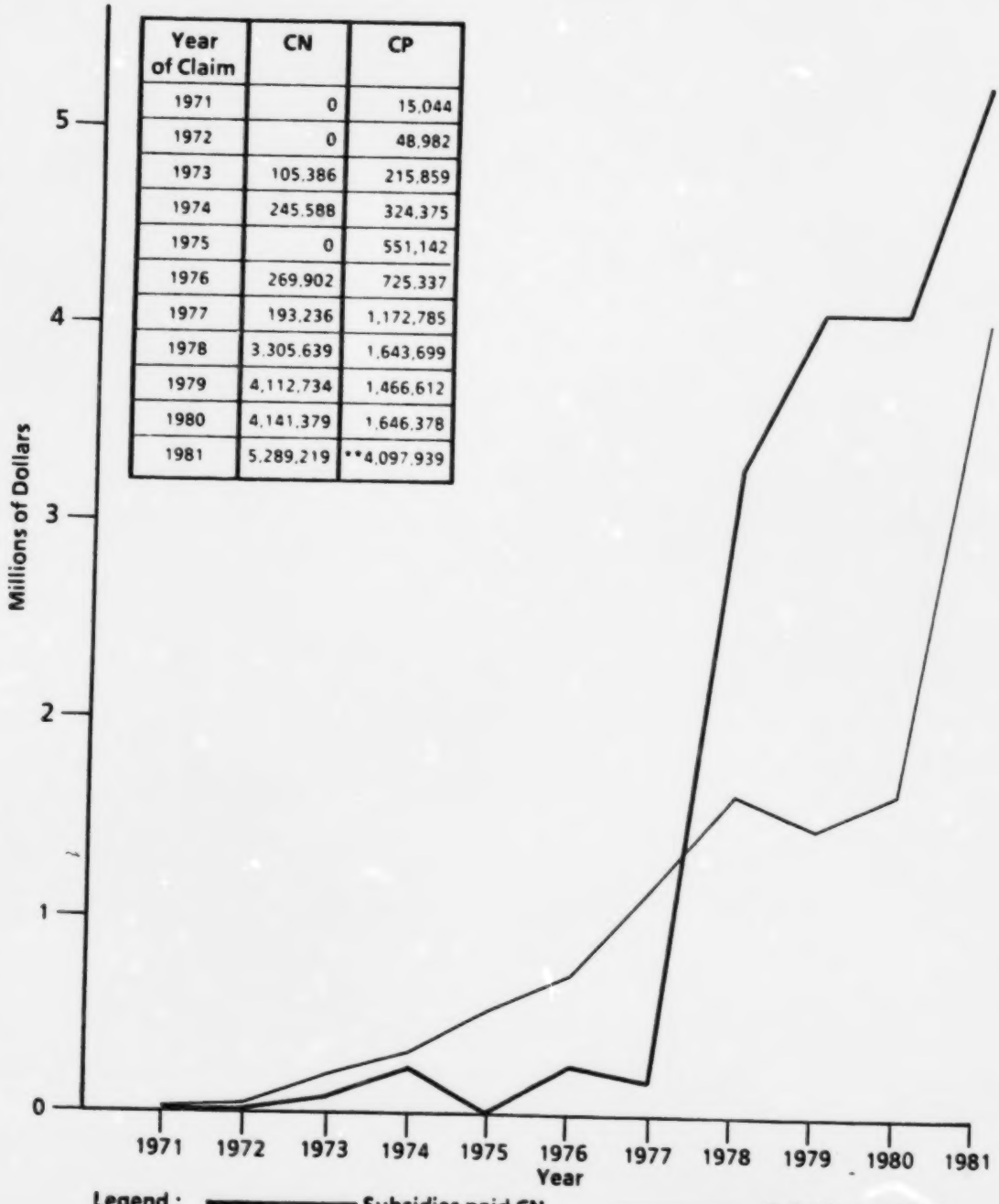
* Sections 256 and 258 of the *Railway Act*

**Final claim, subject to revision

Source : Canadian Transport Commission,

Figure 1.3
SUBSIDIES PAID FOR NON-PRAIRIE BRANCH LINES*

Year of Claim	CN	CP
1971	0	15,044
1972	0	48,982
1973	105,386	215,859
1974	245,588	324,375
1975	0	551,142
1976	269,902	725,337
1977	193,236	1,172,785
1978	3,305,639	1,643,699
1979	4,112,734	1,466,612
1980	4,141,379	1,646,378
1981	5,289,219	**4,097,939



Legend : Subsidies paid CN — Subsidies paid CP

* Sections 256 and 258 of the *Railway Act*

**Final claim, subject to revision.

Source : Canadian Transport Commission,

TABLE 1.3
CN & CP COMPARATIVE DATA
(1982)

		Statutory Grain & Grain Products	All Other Goods	Total
1.	Cars	453,367	1,221,993	1,675,360
2.	Tons (2000 lbs.)	33,445,000	86,739,000	120,184,000
3.	Revenue ($)	176,172,000	2,094,883,000	2,271,055,000
4.	Ton-miles	30,778,469,000	57,559,593,000	88,338,062,000
5.	Car-miles	420,458,000	908,849,000	1,329,307,000
6.	Av. Haul (miles)	920	664	735
7.	Av. Tons/Car	73.8	71.0	71.7
8.	Revenue/Car ($)	389	1,714	1,356
9.	Revenue/Ton ($)	5.27	24.15	18.90
10.	Revenue/Ton-mile (¢)	0.572	3.639	2.571
11.	Revenue/Car-mile (¢)	41.90	230.50	170.85

Source: Commission Records

If that subsidy is considered to be a revenue to the railway, which it really was, a different picture emerges. Table 1.4 shows that the railways, in reality, received 1.5¢/ton-mile for moving statutory grain instead of 0.5¢/ton-mile (Crow Rate). In comparison to 3.6¢/ton-mile for other revenue the railways actually received three times the "Crow Rate" for transporting statutory grain traffic. Considering other Government assistance related to grain, which was paid to the railways, they received more than 1.5¢/ton-mile for transporting grain.

Whereas the losses incurred by the railways for the total movement to destination of grain originating on Prairie branch lines was compensated by subsidy, the losses incurred by the movement of grain originating on main line, secondary main line and branch lines not considered uneconomic were not so-compensated. In 1982, for example, roughly 19.9 million tons of grain originated on uneconomic branch lines and 13.6 million tons originated on other trackage. Therefore, the movement of about 60% of statutory grain was subsidized and the railways apparently incurred a loss on the remainder.

TABLE 1.4
COMPARISON OF CN/CP REVENUE RECEIVED FOR GRAIN
WITH AND WITHOUT SUBSIDY
(1982)

	Statutory Grain Revenue With No Subsidy	Subsidy Revenue	Statutory Grain Revenue With Subsidy	Other Goods
Revenue ($ million)	176	279	455	2,095
Revenue/Ton ($)	5.27	8.34	13.60	24.15
Revenue/Ton-Mile (¢)	0.572	0.906	1.478	3.639
Revenue/Car-Mile (¢)	41.90	66.36	108.22	230.50

Source: Traffic & Tariffs Branch, CTC.

Apart from the branch line subsidies, funds were provided for Prairie branch line rehabilitation and Government purchased/leased grain hopper cars. Annual rehabilitation estimated at a 10% cost of money, applied to a total program budget of about $1 billion (reference: Grain Transportation and Handling Division of Transport Canada) for a grain movement of about 30 billion ton-miles would represent an annualized cost of about 0.3¢/ton-mile. As well, the economic value of the replacement cost of Government grain hopper car purchases/leases amounts to about 0.4¢/ton-mile.

Recognizing that these estimates are very crude, they nevertheless indicate the significance of Government assistance in the handling of grain other than through branch line subsidies. The total 1982 Government assistance in handling grain is thereby summarized in Table 1.5.

Table 1.5

SIGNIFICANCE OF ALL GOVERNMENT SUBSIDY
TO GRAIN TRANSPORTATION PRE-WGTA
(¢/ton-mile)
(1982)

	GOV'T	GRAIN PRODUCER	TOTAL
a) Crow Rate	-	0.5	0.5
b) B/L Subsidy	0.9	-	0.9
c) Rehabilitation	0.3	-	0.3
d) Grain Hoppers	0.4	-	0.4
TOTAL	1.6 (76.2%)	0.5 (23.8%)	2.1 (100.0%)

From this it can be seen that the railways received up to 2.1¢/ton-mile for statutory grain service and that Government paid up to 76% of the total related costs for that movement.

Under WGTA, losses incurred on grain traffic originating at any point are compensated and a provision for contribution above cost is also provided the railway. As a result, although the grain producer pays more, so does the Government. Furthermore, the Government in 1984/85 crop year paid proportionately more, through subsidy related to grain, than it did in 1982 as estimated in Table 1.6.

Table 1.6

SIGNIFICANCE OF ALL GOVERNMENT SUBSIDY
TO GRAIN TRANSPORTATION POST WGTA
(¢/ton-mile)
(1984-85)

	GOV'T	GRAIN PRODUCER	TOTAL
a) Producer Share	-	0.74	0.74
b) Gov't Share	2.34	-	2.34
c) Rehabilitation	0.3	-	0.3
d) Grain Hoppers	0.4	-	0.4
TOTAL	3.04 (80.4%)	0.74 (19.6%)	3.78 (100%)

It seems reasonable that the grain producer will, over time, be increasingly concerned with the cost effectiveness of the transportation services offered by the railways. However, as the payments for services do not distinguish local branch line inefficiencies, as the cost to the grain producer is based on an aggregate determination of per-mile costs, all grain producers will, in a sense, be cross-subsidizing the more inefficient parts of the system. Once again, a system will be in place which does not promote change to improve transportation efficiency and which maintains cost-ineffective, inefficient operations contrary to major cornerstones of the National Transporation Policy.

In a theoretical sense, if there were no branch lines, the WGTA unit per mile rate would be substantially less than if the current branch line systems were maintained and the public purse would carry much less of a deficit. From another point of view, the grain producer who utilizes an uneconomic branch line will be cross subsidized by the grain producer who ships from a main line point, as the latter would pay significantly less if he only had to pay for the per mile rate determined from the offline or main line costs. The method of rate determination under the WGTA has therefore the impact of again providing little incentive for the improvement of the efficiency (cost effectiveness or service level) of uneconomic branch line

service as the user of the inefficient feeder service does not pay for it in total — the farming community, as a whole, does.

1.4 Non-Prairie Branch Line Subsidies

The branch line subsidy under the Railway Act scheme also served to compensate the main line railways for losses associated with retaining non-Prairie branch lines, at Government request. The main line railways would allegedly otherwise abandon those branch lines. Non-Prairie branch line retention requirements were and now are also based on "the public interest" in the context of the perceived need of the branch line by the local community and often on the expectation that the branch line may become economic in the future.

The past losses incurred on non-Prairie branch lines are very small compared to the past losses on Prairie branch lines ($12.5 million versus $309.8 million in 1982). However, the unit loss is substantially higher on non-Prairie branch lines ($1,949 per carload versus $984 per carload in 1982).

1.5 Branch Line Costing and Subsidy Criteria

The criteria pertaining to the subsidy of uneconomic branch lines are now housed in the Railway Act, the Reasons for Order R-6313 (1966-69) CTC 361 (RTC), and the Western Grain Transportation Act.

The Railway Act

For a branch line to be eligible for subsidy under the Railway Act it must be shown to be uneconomic by virtue of an "actual loss".

Section 252 of the Act provides the following definition of actual loss:

> *"252. In this section and sections 253 to 258, "actual loss" in relation to any branch line means the excess of*

(a) the costs incurred by the company in any financial year thereof in the operation of the line and in the movement of traffic originating or terminating on the line over

(b) the revenues of the company for that year from the operation of the line and from the movement of traffic originating or terminating on the line."

Order 6313

The legal effect of the definition of actual loss was considered by the Commission in Reasons for Order R-6313 (1966-69) CTC 361 RTC. In considering the avoidable cost approach in connection with the actual loss formula prescribed by the statute, the Commission heard from a number of parties. The Manitoba Branch Line Association advanced the argument that offline costs should not be included in the computation of actual losses, particularly in respect of grain-dependent branch lines, because of the fact that most of this traffic is transferred to other adjacent lines of a railway company. The Commission rejected that theory in the following words reported at page 434 of the reported Reasons for Order R-6313:

"...Section 314A requires that the cost side of the actual loss calculation include "the movement of traffic originating or terminating on the line" and that the revenue side include all revenue from the movement of traffic originating and terminating on the line. Counsel for the Manitoba Branch Lines Association made the point that most of the grain traffic on branch lines proposed for abandonment in the Prairie Provinces will merely be diverted to other lines. The language of the Act nevertheless governs the calculation of actual loss and it requires inclusion of all "offline" costs, that is, all costs incurred in moving traffic originating and terminating on the branch line when that traffic is on mainlines to which the branch line at issue connects."

It is pursuant to Order R-6313 that actual loss determinations are made for abandonment and subsidy purposes. From a legal point of view, the inclusion of offline costs in the costing determination is acceptable and thereby is in accordance with the definition of actual loss provided by section 252 of the Railway Act. That is not to say, however, that we

necessarily agree that these provisions and interpretations are still valid from an economic point of view.

Furthermore, sections 256(7) and (8) do provide the Commission with a very wide discretion to include or exclude items and factors relating to costs and revenues for actual loss determinations in respect of both the abandonment and subsidy provisions of the uneconomic branch line code set out in the Act. These subsections, however, do not detract from the definition of actual loss for the purposes of abandonment and subsidy which is set out in section 252 as it now exists.

It is important to note here that the determination of these cost elements are not totally based on the actual, line specific, or "situs" expenses incurred, by the main line carrier, in the operation of the branch line or in the movement of branch line originating or destined traffic on other lines. These costs are founded on a costing methodology which is based on railway system costs modified and allocated to the branch line and the online movements in combination with costs directly incurred thereon. One knowledgeable railway accountant said of Order R-6313 "...it is an economist's dream and an accountant's nightmare...". We, however, do not have the mandate nor the time to delve into this most complicated area. However, we believe that the R-6313 costing method, in today's context, may not result in an accurate reflection of true branch line costs.

The introduction of the WGTA has not changed the costing procedure specified by Order No. R-6313 and that procedure is the basis of determining the rates under the WGTA for grain. Our concern, therefore also is with the accuracy of cost determinations under the WGTA which dictates the transportation bill for the grain producer and the required subsidy bill to the public purse.

The Western Grain Transportation Act

With the institution of the WGTA, the Crow's Nest Pass Agreement was replaced on January 1, 1984. Under this scheme, a new rate scale is

determined by the Commission by April 30 of each year and the railways must publish their tariffs by May 31. Before, the subsidies were based on the costs and revenues respectively allocated and received for statutory grain and all other traffic originating and terminating on uneconomic branch line points. Now, under WGTA, payments are made for grain originating and terminating on branch lines and secondary and primary main lines.

Initially, under WGTA, the Federal Government will continue to subsidize the movement of grain, but, with time, the proportion of the payment that the Government pays will reduce as the proportion that the farmer pays increases.

Under the WGTA a required revenue is determined for the movement of the eligible grain. That, less the revenue related to the Crow Rate, is referred to as the "short fall" — an amount which is shared by the farmer and the Government so that the Government share decreases proportionately over time, as the farmer's share increases.

In terms of Prairie and Non-Prairie branch lines, the "branch line subsidies" which were widely perceived to be subsidies to the railways, were, and continue to be, in fact, subsidies to the shippers on certain branch lines. Insofar as the subsidy was paid to the railways rather than the shippers only reflects the fact that the subsidy was for losses incurred in carrying out an imposed public duty that the railways would not otherwise perform. This principle remains unchanged, however, under WGTA, the process of compensating for losses is different. WGTA payments are in reality subsidies to the grain producers, not to the railways, however that does not from one point of view mean that there are no uneconomic Prairie branch lines or that the related deficits are not in fact subsidized.

Where an uneconomic branch line has been designated as a grain dependent branch line pursuant to section 40 of the WGTA, sections 256(1) and 258(3) of the Railway Act, as amended by sections 66 and 67 of the WGTA, prohibit the payment of uneconomic branch line subsidies in respect of that particular grain-dependent branch line. Instead, the railways are

compensated for the movement of grain over any line of railway within a defined geographical area (definition of "movement" in section 2 of the WGTA). The Government pays part of the toll for carrying grain, firstly, in the form of the Crow benefit, which is an amount established under section 34(1). To this amount is added the government share of the rate of cost change, (currently everything over 3% but eventually everything over 6%, according to section 54(1)).

The costing procedures under the WGTA differ from the costing procedures for subsidies under sections 256 and 258 of the Railway Act only in that, under the WGTA, a factor of the volume-related costs is added to allow for contribution or profit.

Pre-WGTA, and in respect of statutory grain originating on grain dependent Prairie branch lines these deficits were paid by the Federal Government — those subsidies being determined by the difference between the sum of the online and offline costs less the revenue received for the total movement originating or terminating on the uneconomic branch line. The grain producer used to pay only the "Crow rate" (0.5 cents per ton-mile) irrespective of the cost of moving his grain on the uneconomic branch line or main line. The cost effectiveness of the service was therefore of little concern to the grain producer, as his cost was fixed, except for the influence of the haul length, over which he had no control. There was therefore little reason for the farmer to be concerned about the cost effectiveness of the transportation services he received, except in the context of level of service. This has not changed with the institution of the WGTA as, once again, the true costs of branch line service are obscured through blanket system-wide treatment of costs and subsidy.

1.6 Views of Parties on Costing Principles and Subsidies

The Hall Commission of 1977 entitled, Grain and Rail in Western Canada, commented on Costing Order R-6313 as follows:

> *"(R-6313)...has been the basis under which so-called branch line subsidies were paid. It failed in its*

> *objective. Grain dependent lines were allowed to deteriorate in condition and service. The subsidy was originally intended for the maintenance of branch lines. In reality it became a subsidy on grain..."*

It appears that this shift in thinking was balanced off by the introduction of the Government paid grain branch line rehabilitation program.

A number of interested parties in this inquiry questioned whether the method of determining branch line costs under the Railway Act and R-6313, results in a loss determination greater than the specific expenses incurred by the railways in uneconomic branch line service.[1] Comments generally addressed the appropriateness of including offline costs in the "actual loss" determination because offline costs are not branch line costs. In addition, these parties cited the use of "manipulative bookkeeping", system cost averaging and unnecessarily expensive track material result in higher than realistic branch line losses.

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[1]Raymond Bernier, Manitoba Pool Elevators Sub-District 805, Acadia Valley Rail Retention Committee, Manitoba Department of Highways and Transportation, Go North Committee, Traffic Gravel and By Products.

Closely allied with the above mentioned group of interested parties was a larger group who, regardless of the way in which railway costs are determined, maintained that branch lines and/or railways are the lowest cost way of moving bulk commodities to market. Those holding this view were towns, villages, and individuals[2] who would be immediately affected by branch line abandonment.

Finally, a third group[3] appeared to have no interest in branch line costs or costing procedures. They simply stated that they favoured retention of branch lines or that they viewed the branch line as a prerequisite to attract industry or to maintain the livelihood/tax base of the community.

Nonetheless, CN's submission refers to branch lines as a high cost portion of their operations. They state:

> *"(the operation of)...low density lines constitute an inefficient use of the railways physical assets such as rolling stock, as well as diverting scarce capital funds which could be better utilized in the maintenance and expansion of the main line network...the elimination of inadequately productive branch lines and economic rationalization of the Canadian transportation network is important for improving total system productivity...(as long as the principles of efficiency, best use of all*

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[2]Raymond Bernier; National Farmers Union Local 611; Manitoba Pool Elevators Sub District 805; The Canadian Railway Labour Association; Felix Holtman, MP; Bigriver Rural Municipality; Retention Committee of the Rossburn CN Subdivision; Shamrock Sub Rail Line Retention Committee; United Transportation Union; Preeceville Kevington Save Our Rail Committee; McCain Foods Limited, Preeceville and District Chamber of Commerce; Fisher Branch Farm Business Group; Acadia Valley Rail Retention Committee; John Gormley, MP; McMahon and District; Regional Municipality of Coulee No. 136; Coderre Rail Retention Committee; Amaranth Rail Retention Committee; Transport 2000; Interlake Development Corp., and Transportation; Big River Wheat Pool Committee; John Obelnicki and Son; Village of Paradise Valley Line Retention Committee for the Furness Sub; Truax Rail Retention Committee; Big Beaver Railroad and Elevator Retention Committee; Weekes Branch Rail Line Retention Committee; and Le P'tit Train Des Laurentides Inc.

[3]Maniwaki, Village of Lintlaw, Paradise Valley, Mr. Robert O'Leary, Reward Wheat Pool Committee, Lintlaw Saskatchwan Wheat Pool, Village of Coderre, NWT Motor Transport Association, Red Deer Regional Planning Commission, Linke Agencies, and Mrs. Gabrielle Roland.

modes and fair sharing of costs by each mode are followed in the process)."

Although we don't disagree with what CN has said, we are cautious insofar as we are not completely satisfied that the R-6313 costing methodology accurately reflects CN's branch line expenses.

Meanwhile, CP asserts that:

"(it is) the continuing financial responsibility of the Federal Government to ensure that the grain dependent branch lines are rehabilitated to completion according to agreed standards."

In light of the Hall Commission's comments, noted previously, we question whether past subsidies determined under R-6313 should not have resulted in a branch line plant that is well-maintained.

1.7 Conclusions

a) Before the institution of the WGTA, the movement of statutory grain from uneconomic Prairie branch lines has been subsidized to final destination whereas, if that grain originated on main line, secondary main line or an economic branch line, no subsidy would have been paid for the on or offline movement. As a result, the railways lost little, if anything, from servicing uneconomic branch line originating statutory grain and lost money on the lower cost service supplied to statutory grain, originating on main line, secondary main line and economic branch lines. Therefore, those producers who trucked a longer distance to an economic track segment, at their cost, did not gain from subsidies. They incurred extra expense, whereas those who trucked a shorter distance to track segments deemed uneconomic, theoretically gained from the subsidies, even though

their choice was likely the more costly route from farm to final destination. In other words, the subsidy program supported the maintenance of uneconomic, inefficient branch lines — a situation contrary to major cornerstones of the current National Transportation Policy. There appears to have been relatively little reason for main line railways to have been upset about having to operate Prairie branch lines as an imposed public duty pre-WGTA.

b) Insofar as past branch line losses have not materialized in higher rates to the shipper on uneconomic, inefficient branch lines, that shipper has had little economic reason, to seek efficient, lower cost options. The shipper, knowing that the losses are paid by someone else, namely from the public purse, and that the rates would, in effect, be artifically low, is indirectly pressured, by the subsidy process, into supporting the retention of uneconomic and inefficient transportation services.

c) The Government, through the subsidy program, has fostered the retention of uneconomic and inefficient transportation services at a substantial cost to the public, and yet the process involved does not apparently foster serious consideration of the cost effectiveness of non-branch line feeder system options, such as extended trucking, offline elevator operations, or potentially lower cost railway options such as short line operations.

d) The subsidies paid have been based on a costing system which is not based solely on site-specific and auditable branch line expenses, but rather on what

might have been a questionable and perhaps an inflated cost base for branch line operations and perhaps even for main line operations. In this respect, in 1982, average branch line losses represented more than $1,000 per carload originating/destined to uneconomic branch lines.

e) The criteria for subsidizing traffic, originating or terminating on an uneconomic branch line, was that the branch line be uneconomic and yet, most subsidies exceeded the online or branch line costs. Insofar as the subsidy exceeded the branch line cost, that incremental subsidy could be argued to have been an over payment to the railways, as, if the branch line costs were covered, the branch line would cease to be uneconomic and therefore there was no need to subsidize furtherance movements beyond the branch line junction. The past interpretation of the Railway Act and Costing Order R-6313 nevertheless supports this procedure resulting in conflict with the primary subsidy criteria: i.e., the branch line must be uneconomic for subsidy to be paid.

f) The branch line loss per carload on non-Prairie branch lines was roughly twice that in the Prairies ($1,900/car versus $1,000/car) even though rates on most traffic moving from/to non-Prairie branch lines are market rates set by the railways and which, by law, should at minimum be compensatory: i.e., equal to or greater than long run variable costs.

g) The loss incurred on carloads from/to Prairie branch lines was more than twice the online costs —

($309.8 million versus $138.8 million) indicating the substantially higher costs of branch line service versus that on main line.

2.0 POTENTIAL OF OPTIONS TO BRANCH LINE USE

2.1 General

One of the central themes of this inquiry is to review the potential for innovative approaches to dealing with railway branch lines. Therefore, the discussion of options to branch line use is based on a number of assumptions that stem from the understanding that past Government policies, with respect to branch lines, are not necessarily cast in granite.

It is unlikely that the owning carriers would part with branch lines that are economic, according to their criteria. It is also unlikely that Government would contemplate intervening in the operation of economic branch lines that the carriers wish to retain and we agree with this premise. It is possible that the railways would like to abandon certain branch lines which do not incur a loss but which yield an unacceptable level of profit.

There are but two basic options in dealing with uneconomic branch lines under existing legislation: retain them or abandon them. If retained, they must be reviewed again within five (5) years and thereby risk to potential industrial development reliant on plant gate rail access is heightened.

Under the Railway Act, Government subsidies have been paid to compensate the main line owners/operators for the imposed public duty of retaining branch lines that they argue they would otherwise abandon. The shippers and consignees on an uneconomic branch line are, in fact, the parties that are subsidized. There is therefore little reason for them to argue against retention. It costs them nothing directly and they need not make any commitment to use the branch line in any event. Some perceive the subsidized retention as a means to lower the rates charged by local truckers — the mode they may, in fact, really intend to use. Others view the retention from a nostalgic perspective, or for other "soft reasons". The railways are paid for their losses. There is often little analysis of the cost effectiveness of the decision to retain and subsidize, given the other

options that are available. The abandonment process is often lengthy and hence costly.

This is not to say that all reasons for the retention of such uneconomic lines are invalid. There may be pending developments which would commit to using the branch line and which may not occur if the branch line were abandoned. Even in such cases, the subsidy is not really a transportation subsidy. It is a subsidy to the developing industry/business and the community where it is located. It could be argued, as well, that such subsidies involve unfair Government intervention which reduces competition from other modes of transport — namely the local trucker — and which retards the application of innovative technologies and operating techniques which would result in lower costs.

The point is not to criticize how uneconomic branch lines have been treated in the past. Rather, it is to suggest that there may be alternatives to the past policies which would result in improved physical and economic efficiency of railway transportation, at the same time ensuring no unfair intervention in the competition for traffic.

If all policies, procedures and decision criteria remain "as is" we believe that:

a) Recognized inefficient and cost ineffective segments of the transportation system, that would otherwise be abandoned on business criteria, would be retained through Government intervention, at sizeable public expense, resulting in subsidies to industries, businesses and communities, solely on the basis that they are located in proximity to an uneconomic branch line, while at the same time there are other Government assistance programs in place with the primary mandate to deal with such matters on perhaps more applicable and universally equitable payment criteria;

b) There would continue to be little incentive for any interested party to seek methods of improving the efficiency and cost effectiveness of those aforesaid branch lines and the owner/operators would have no reason to seek innovative means of reducing costs;

c) there would continue to be Government intervention which would tend to unfairly distort competition through effectively restricting entry to the branch line feeder function from those who may be able to perform the function more efficiently at lower cost; for example local truckers, offline elevator operations, or short line entrepreneurs; and

d) in some cases, the five year review of retained branch lines poses a risk to potential industrial development reliant on plant gate rail access, due to the unsure outcome of the review.

If, for whatever reasons, the policy of subsidizing uneconomic branch lines is maintained, it could be argued that the main line carrier should not hold a monopoly on such subsidies. Others who are interested in operating the branch line that the main line carrier wishes to abandon should, perhaps, be given the opportunity to do so.

It has been proven in the United States, for instance, that a number of track segments, deemed uneconomic by main line carriers, can and have been operated by short line operators for a profit and to the greater satisfaction of the local shippers and consignees. If such operators could show that they could operate Canadian uneconomic branch lines more efficiently than their main line carrier colleagues, then it could be argued that they should be allowed to purchase and operate same.

If they were so-permitted, it could also be argued that they should be granted the same treatment as their big brothers in terms of

receiving subsidies — even though short line operators, under current legislation, may be under Provincial jurisdiction. If the U.S. experience can be repeated here, it is highly possible that the short line subsidy would be less, and perhaps far less, than that paid if the main line were the operator. Perhaps a method of bidding on such operations would "flush out" the merits of such a policy.

In a sense, the adoption of such a policy would permit competition for Government subsidies that would otherwise be spent by the few branch line owners who could be viewed to hold a monopoly on such subsidies at the present time. It could also result in more efficient and cost effective feeder service to the main line or secondary main line. Transportation costs would have a better chance to be reduced. Technological and operational innovation would be given a better chance to flourish.

In the same context, it seems reasonable to contemplate a non-rail carrier to compete for the Government subsidy that would otherwise be paid to the main line carrier for branch line services. The principles are the same except, for instance, truckers would have the opportunity to compete for the feeder service and for subsidy funds, even though their operations may be under Provincial jurisdiction. If such a policy was implemented, there would be a chance for the most efficient most cost effective service to be found in consideration of all the available modes of transport.

We have pointed out earlier, that branch line subsidies are really assistance to branch line users. With this we have no quarrel. However, we recognize that if the overall policy is to attain lowest total transportation cost then a branch line restricted subsidy program may be counter-productive. Indeed, we intepret this inquiry's terms of reference to recognize this possibility in that we are charged to assess a number of alternatives to the existing feeder system comprised of conventionally operated branch lines.

There are really two major issues here. First, we must evaluate the relative costs of options to conventional branch line operation so as to assess potential of these options to achieve lower transportation costs and

higher efficiencies. Secondly, based on that assessed potential, mechanisms must be evaluated so as to permit the benefits of those options to materialize. Herein we will deal with the former issue. The latter issue will be addressed in the following section of this report.

The terms of reference for this inquiry require us to assess the following options to conventional branch line service:

a) short line railways
b) offline elevator-trucking operations; and
c) innovative approaches to conventional branch line operations.

Before dealing with these options individually, the competitive position of the conventional branch line operation — from a cost point of view — must be cited. In previous discussion, we have dealt with branch line economics in an aggregate fashion. Herein we must be more site-specific as the potential for the options cannot realistically be assessed in aggregate.

2.2 Option Potential

The most current, comprehensive and accurate branch line costs, available to us, are those developed for subsidy payment for the year 1982. These are plotted on Figures 2.1 and 2.2 respectively for Prairie and non-Prairie branch lines.

These two figures demonstrate the relationship between average unit branch line cost (¢/ton-mile) and average branch line haul length. Indeed, the scatter of data is large — particularly for non-Prairie branch lines.

The predominant Prairie branch line costs, in 1982, vary from about 40-50¢/ton-mile for very short branch line haul lengths (less than 10 miles) to 5-15¢/ton-mile on longer hauls (in excess of 50 miles). There are no Prairie branch lines which cost even close to the current WGTA rate of about

2.5¢/ton-mile and certainly none that were even close to the previous Crow Rate of 0.5¢/ton-mile.

Non-Prairie branch lines cost significantly more (in terms of ¢/ton-mile) than Prairie branch lines — indeed some cost in excess of $10.00 per ton-mile! Yet others, not shown on Figure 2.2, do not have any traffic at all, hence the cost per ton-mile is theoretically infinity.

Given this wide spread in unit branch line costs and the cost magnitude of the more expensive branch lines, it indeed appears that there is potential for reducing transportation costs by permitting other options to compete fairly for providing the feeder services, that Government now pays for in large part.

2.3 The Short Line Option

What is a Short Line?

There is a considerable amount of confusion when talking about a short line in terms of what the word specifically means. This impression has been gained from a number of conversations with people who are in the railway business, related associations and from a review of the key reports on the subject. Many have not heard of the term before. It is therefore essential to define clearly what a short line is, if nothing more than for purposes of avoiding misunderstanding of this text.

"Short line" is a colloquial term commonly used to describe a railway of small physical and/or financial stature. The Association of American Railroads (AAR) appears to prefer the use of a synonym — "small railroad". Others would argue that a short line is a class III railway (ie: a railway with a gross revenue less than $10 million per year). Some would include terminal and switching railways under the short line classification - -others would not.

Figure 2.1
PRAIRIE BRANCH LINE COST PER TON-MILE
(1982)

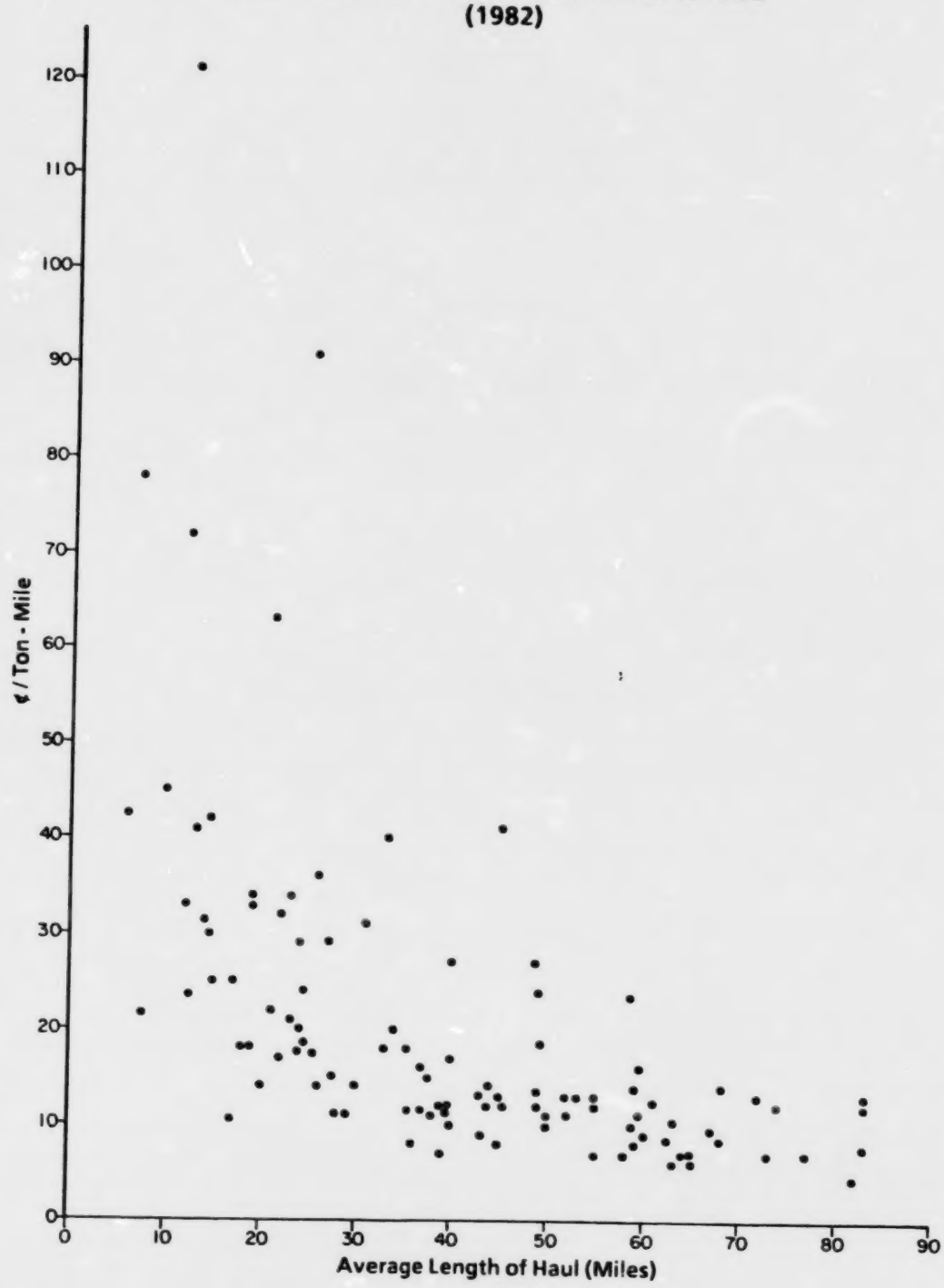
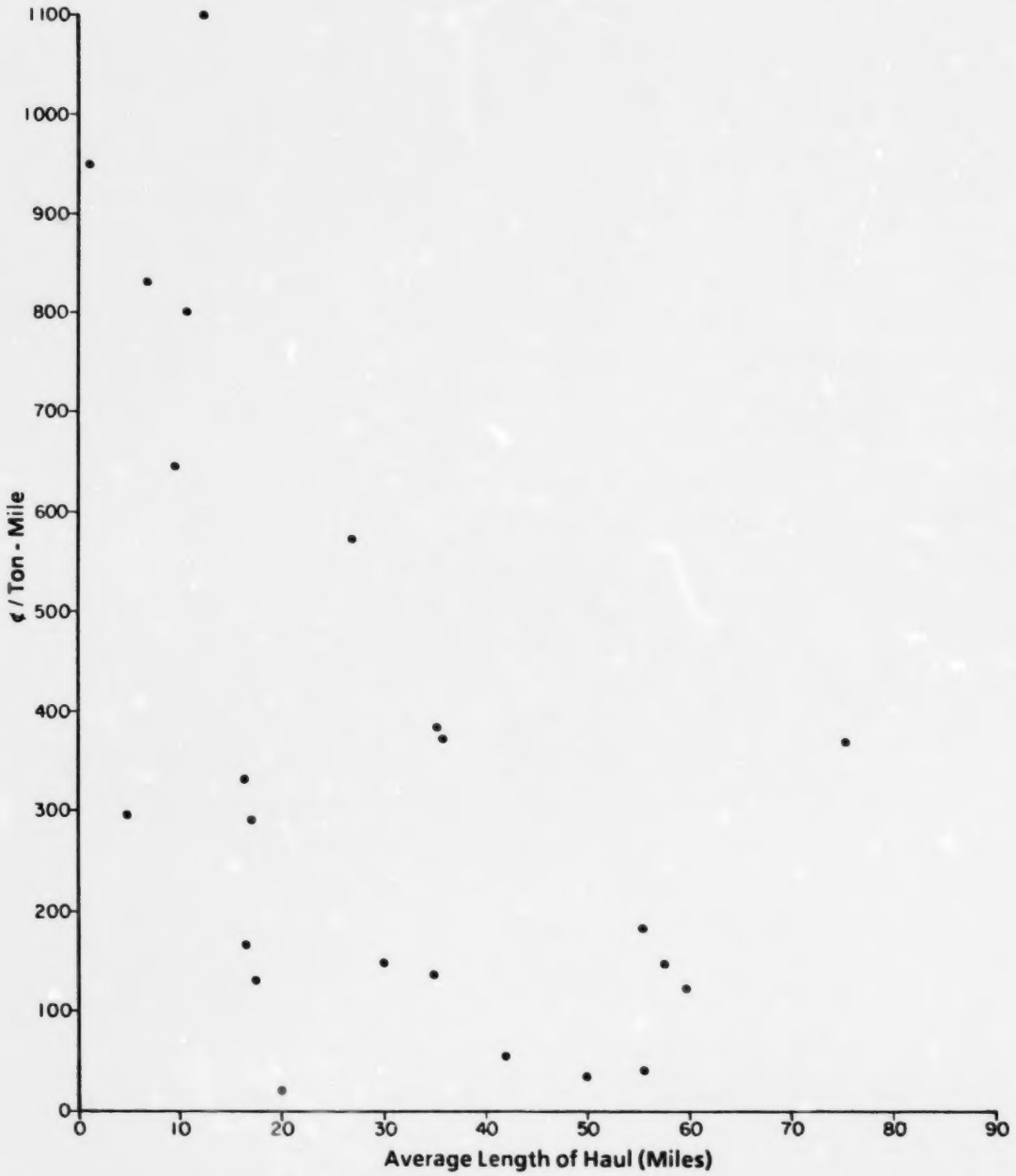


Figure 2.2
NON-PRAIRIE BRANCH LINE COST PER TON-MILE
(1982)



Those railways that have come to be known as short lines or whose parents would classify their railways as short lines are comprised of widely varying characteristics. Some exceed 500 miles in length. Some are but a few miles long. Others receive in excess of the $10 million maximum gross revenue criteria for Class III railways. Several involve more than one railway operation. As well, the evolution of these lines vary, including: a) take over of a branch line deemed uneconomic by the main line carrier/owner; b) take over of what was formerly a section of main line or secondary main line; or c) construction of a new small line to perform local services.

The average characteristics of railways recognized in the United States as being short lines or small railways are roughly as follows: a) 30 miles of track; b) 3 locomotives; c) 2-3 person train crews; d) $2 million annual gross revenues; e) over $1 million in assets; f) net income of about $0.25 million; and g) $750,000 in annual payroll. The extremes of each characteristic are substantially different, however, two major characteristics appear to be predominant: a) non-union labour and/or limited work rules and craft lines; and b) local ownership and/or management. It is these latter two characteristics which are generally pointed out to be the major advantages of short line operations.

The Grain Transportation Branch of Transport Canada recognized these latter two characteristics, in 1975, when its staff defined a short line as being "...a railway company of purely local character which is operated in such a way that personnel perform a variety of duties and are not affected by union job demarcation boundaries".

Particular interest herein is the potential for branch lines to be independently owned and/or operated by small companies. In this context, the American usage of the term short line or small railway does not completely apply in Canada, as it is too broad. To the extent that it is not clear that non-union operation of short lines evolving from branch lines abandoned by their main line carrier owners will be possible, under the Canada Labour Code, the Grain Transportation Branch definition may not be applicable as it

is too narrow. Arbitrary track length or gross revenue are not sensibly definitive criteria. The potential track for short line use is pre-defined -- that is, existing branch lines of any length. The potential gross revenue is dependent on many factors including relations with the main line carrier and government subsidy policy. In brief, and for purposes of this inquiry, the following definition shall be used:

> "A short line is a company, under Federal or Provincial jurisdiction which owns or leases a branch line(s), connecting with one or more tracks owned and operated by one or more main line carriers and which operates trains on that branch line(s) as a feeder service to the main line carrier's track for furtherance by that main line carrier and/or as a feeder service from the main line carrier's track to points on the branch line(s), with the intent of yielding a direct or indirect economic benefit to its owners."

There is obviously no perfect definition. The above is not intended to be used in a universal context. Indeed, as was seen earlier, even the definition of "branch line" is not a clear-cut matter. The above definition does, however, reflect the extent to which this subject will be viewed herein.

The U.S. Short Line Experience

The number of small railways in the United States peaked in 1909, declined to a low in 1970, and has increased thereafter to current levels of about 400 -- one third of which are of the switching and terminal variety. The recent resurgence has been a result of a number of factors related to the bankruptcies of several major railways, legislation granting ease of abandonment of uneconomic lines, acquisition of same by third parties, and Government funding of local initiatives for the rehabilitation and operation of essential branch lines, which were unwanted by or uneconomic for main line carriers. Representing about 80% of all railways in the United States and

proportionately large relative to U.S. corporation standards, the small railway handles about 3% of all U.S. railway freight traffic. Most (85%) of originating or terminating small railway traffic moves on other railways and, although not necessarily so 10-15 years ago, small railways in the U.S. are now viewed by most main line carriers as a partner rather than a competitor or a pest. Many of these small railways fall into the aforementioned definition of short line railway and these did and will likely continue to play an important role in U.S. transportation and in maintaining the economic well-being of local small American communities and businesses.

There are volumes of data relating to all aspects of the American short line. Although it is tempting to reiterate that data in the restricted context of this report, hoping for a set of criteria to simplify the task of assessing the potential for short line operation on Canadian branch lines, that temptation was thwarted by a number of factors.

In a major book on the subject, issued by AAR ("Small Railroads"), the following was concluded:

> *"The onerous task of identifying the basic characteristics of small railroads -- that is, their number, historical trends, role, locations, and ownership -- led to an immediate and invaluable conclusion. Small railroads do not comprise a homogeneous industry. Thus, generalizations about small railroads may not only be inappropriate, they may also be misleading."*

Indeed, having reviewed a number of papers and articles on the subject, prior to meeting with the Association of American Railroads (AAR) and the American Short Line Railroad Association (ASLRA) in Washington, the conclusions from those papers, compared to the experience of the AAR and ASLRA, clearly proved how misleading such generalizations can be.

Furthermore, it became readily apparent from the review of the literature and from discussions with U.S. experts that numerical criteria for successful short line operation in the U.S. may not apply to the circumstances surrounding the Canadian branch line. Past Canadian policies and

legislation pertaining to grain related and branch line subsidies, institutional factors related to the transport of grain and the retention of uneconomic branch lines, coupled with the changes from the days of the Crow's Nest Pass Agreement to the present and future of the Western Grain Transportation Act (WGTA) and the provisions of the Canada Labour Code all add up to a substantially different environment within which to assess short line potential. Therefore, the effort needed to attempt a conversion of U.S. experience to reliable criteria of use in the Canadian environment is of questionable cost and time effectiveness.

The broad and logical business experience recorded for U.S. short lines is, however, very relevant — self-evident though that knowledge may appear. One analysis of recent U.S. short line closures and/or ownership changes indicates that short line failure is caused, in order of decreasing frequency, by:

a) inadequate traffic to sustain economic viability — in some cases due to legitimate closures of online businesses, in other cases due to the failure to realize unfounded traffic expectations or to realize shipper promised traffic volumes;

b) extraordinary physical problems — particularly in the areas of bridge structure failures, inadequacy of light rail to handle full modern cars, unexpected washouts and so on -- resulting in large unexpected capital requirements;

c) incompetent management;

d) lack of shipper support and commitment — particularly in terms of meeting forecasted service requirements;

e) lack of capital or credit;

f) inability to obtain a suitable division of rates with the connecting main line carrier.

Conversely, the factors which appear to yield a successful short line operation are those which avoid the above pitfalls; namely:

a) Management should be experienced in railway matters — particularly in terms of ability to negotiate and market services and control budget and personnel;

b) Traffic forecasts, upon which investment decisions are made, should, to the maximum extent possible, be secure through shipper commitments — preferably through "take or pay" contracts;

c) Infrastructure should be sufficient to withstand the car loading and service level required to maintain and develop revenue traffic, hence, to maintain profit growth;

d) Traffic levels and rate divisions should be secured in advance by reasonably binding arrangements;

e) Multiple access to more than one main line carrier should exist so as to have leverage in negotiating division of rates with connecting carrier; and

f) Adequate capital should be available.

Of course, any short line can be successful if it is subsidized — particularly as uneconomic branch lines in Canada have been subsidized in the past, as non grain-dependent branch lines may be subsidized and as grain dependent branch lines are now and will be indirectly subsidized in the future through WGTA payments.

If Government policy to "protect" certain branch lines from being abandoned is maintained and if that is interpreted to mean "...should be operated by present main line owners...", then the potential for short line operation resides only with those branch lines that have been determined to be uneconomic and not protected, subject to review over the next five years by the Commission. In 1982, there were 65 of these representing 2,597 miles of trackage — 23 in the Prairies, 37 in Eastern Canada and B.C. Today, there are only 4 subject to a five-year review and 4 unprotected in the Prairies. Presumably, however, if it is in the public interest for protected branch lines to be run as short lines, then Government policy may change and the main line owners need be granted the right to abandon their operations on any protected branch line for which there is a willing short line operator to purchase and operate same. In this context, in 1982, there were 178 such branch lines representing 9,929 miles of track — 141 in the Prairies and 37 in Eastern Canada and B.C.

For purposes herein, we will assume that any branch line, protected or not, is subject to review to evaluate the potential of short line operation thereon.

Selected U.S. Examples

We met with several American short line railways: The Belfast and Moosehead Lake and The Eureka Southern are two examples. These two represented, in our view, operations covering the geographic and operational extremes that would be faced in Canada. In general, these operations clearly showed the potential economic gains from operating "small".

For example, the 33 mile B&ML, owned by the Town of Belfast, Maine, and operated by only nine employees, at $6/hr, is profitable to the tune of about $100,000 per year. The 165 mile, single commodity, Eureka Southern railway acquired the operation, in late 1984, from Southern Pacific, who had operated the line at a loss since the 1970s. Eureka Southern is currently at the break-even point. Neither received any sizeable operating subsidy, but small capital grants for rehabilitation have or shortly will be received.

In brief, our visits confirmed the gist of the foregoing characteristics of the overall U.S. experience and confirmed that local initiatives can be successful.

Recalling the wide spread of unit costs on Canadian branch lines and knowing how they are operated and how they are costed lead us to conclude that, if the rail option was the only option to feeder services, short line operations could have a significant role to play in lowering rail transportation costs of the more expensive or low density branch line operations. If the short line operator could operate with flexible labour agreements and was afforded the same opportunity to be subsidized as the Canadian main line carriers are now subsidized, that potential for cost reduction would certainly be as significant as in the United States.

If the rail option is not the only option, the potential for short lines may be substantially less. On a "stand alone" basis, for a short line to be competitive with the trucking option, it must offer a rate/service package superior to the cost/convenience advantages of the trucking option — taking into account all handling and indirect costs.

View of Interested Parties on Short Lines

Parties to the current Inquiry were asked to comment on the potential for short line operation of uneconomic branch lines and, as expected, a difference of opinion on the applicability of this option was evident in the responses. A number of parties supported short lines either in principle or to the extent that these could be shown to be the most efficient mode of transportation for the branch line in question although some of these supporters were not very convinced of the viability of short line operation (e.g., Manitoba Pool Elevators). Some felt that they would continue to require active Federal support and promotion (e.g., Ministry of Transport and Communications Ontario).

Other parties thought that short lines could be viable if they were operated as tourist railways or because they could effect substantial

savings through a relaxation of occupational barriers with respect to labour utilization including the use of two-man crews. We believe that tourist operations should rightfully remain a Provincial matter. The second point was, however, challenged by both CN and CP who claim that Canada's Labour Code would not allow the savings that short line advocates claim. Overall, CN and CP among others felt that short line operation would not be feasible in the long run although they might provide some short run relief and should therefore be considered as a potential option to abandonment.

If the short line option was selected, however, CN maintained that:

> *"(it)...must be a separately incorporated and identifiable legal entity whose physical assets are not owned by CN Rail...the assignment of operational responsibility must also carry with it the associated business risk of ownership."*

Also, since compliance with Federal regulations can be an onerous burden, the Acadia Valley Rail Retention Committee suggests that short line operators only be required to obtain a provincial charter to establish operations.

The Government of Saskatchewan, Central Western Railway Corporation (CWR) and Pacific Northern Rail Contractors Corporation (PNR) were the strongest supporters of the short line concept. Saskatchewan suggested that three pilot projects be undertaken using existing branch lines to determine the best method of operating low density lines. The projects suggested are: short-line; road-rail short-line; and, truck on right of way. In Saskatchewan's assessment, each of these is cheaper than the alternatives of either direct or commercial trucking but they suggest a three year assessment period is necessary to adequately judge which of the three is best. In this respect, we support the idea of limited experimentation prior to making irreversable decisions — particularly for innovative technologies such as new road/rail power equipment.

In the assessment of PNR and Central Western Railway Corp., short line operations could improve the efficiency of the grain collection system

at a lower cost than currently prevails. PNR would achieve savings by using lightweight on/off-track motive power on existing 177,000 lb. capacity rail in combination with the operation of converted boxcars in tandem with covered hopper cars. In branch line operation, the hopper cars would be half loaded but they would be "topped up" at the interchange point by transferring grain from their "companion" boxcar. An empty hopper car would then be picked up and re-spotted on the branch line with the now empty boxcar. It was submitted that 20% of grain tonnage moves to export in half-loaded cars. Topping-up could therefore provide substantial offline savings. Other savings would arise from a consistent flow of grain through elevator systems which would allow an organized grain delivery schedule, an improvement in train and yard capacity, and shorter car cycles.

Central Western Railway proposed to achieve savings by cross-qualifying their employees to perform a wide range of functions and thereby substantially reduce their labour costs. Further savings would be achieved by topping-up shipments at Alberta Terminals Ltd. in Edmonton and by using lightweight motive power on branch lines upgraded to a minimum of 85 pound fully tie-plated rail. To operate effectively, CWR feels that they must operate one branch line having sufficient grain volume to support the provision of administration, mechanical services, stores and maintenance of way. Other branch lines would then be operated as add-ons with low incremental costs.

All of the above operations would maintain existing tax bases and rural centres and provide a stable environment for long range planning however, to ensure the financial viability of the short line option, some suitable division of rates or other payment method would have to be arranged between the main line and short line carriers. PNR suggests that the rate division would have to be sufficient to cover costs and a reasonable profit to ensure continuity and progress while CWR claims that to maintain lines properly, splits of 50% and 20% of the respective outbound and inbound rates would be required.

Saskatchewan suggests that the revenue share to the short line operator should cover line plus volume-related costs to the first offline point as per the WGTA, while the Village of Paradise Valley-Line Retention Committee for the Furness Subdivision suggested a 50-50 revenue split. The Alberta Wheat Pool suggests including short line costs in the WGTA base for rate determination and apportionment and CN argues that the division of revenues should be the result of negotiations based on the revenue CN would receive from the short line junction point to the final destination according to the WGTA. CP's position is paraphrased as follows:

> *"A supportive arrangement between the main line carrier and the short line is possible where the freight rates are commercially based and not limited by statute, presuming a mutually beneficial arrangement could be found. Such is not the case with the movement of grain under the WGTA as there would be "...no incentive...for the large railway to support such an arrangement." Freight rates are usually negotiated on a proportional basis with the short line quoting a rate from the origin to the interchange with the larger carrier, and the larger carrier quoting a separate rate from the interchange to destination, or, less frequently, a through rate with the short line receiving a division of the rate."*

2.4 The Trucking Option

General

As a background, a number of shippers truck their product or have their product trucked to the railway main line or secondary main line for furtherance to destination even though the distance to a local branch line is shorter or even though they employ the branch line for part of their transportation needs. Others elect, for various reasons, to employ exclusively the local branch line. Whether a particular shipper trucks or not, the shipper presently has the option of trucking to a secondary or primary main line point for furtherance by rail — thereby avoiding the often cost-ineffective branch line. However, such trucking must be carried out on a "stand alone" basis whereas many of the branch lines are subsidized to offset the reflection of the inherent inefficiencies in the rate applicable

to branch line originating/destined traffic. A number of shippers therefore accept a cost penalty of trucking in lieu of branch line use for reasons other than economic reasons.

Grain Trucking

The 140,000 grain producers inevitably truck their products from the farm gate to an elevator for furtherance by rail to destination. About 40% of the tonnage is trucked to elevators on non-branch line track. Over the years, this primary truck haul has increased in length as a result of a continuous consolidation of elevators. This consolidation is likely to continue, as will the primary truck haul continue to increase.

The number of licensed elevators has decreased from 5,000 in 1968 to less than 2,000 today. Delivery points have decreased from 1,923 to 1,155 in that same time period. By 1990, the number of delivery points could decrease to 600. According to the IBI study for Transport Canada, "The Role of Trucking in the Grain Industry" (1985) current average primary haul length is about 23.2 km (14.4 miles) and that could increase to an average haul length of 30 km (19.7 miles) by 1990. Although this is a relatively large increase (30%), it represents only 15 to 20 minutes in increased truck travel time.

The unit branch line costs depicted in Figures 2.1 and 2.2 were for the year 1982. A report entitled "Grain Trucking Costs in Western Canada" contracted to Trimac Consulting Services Ltd. by the Research Branch of the Commission dealt with the costs of trucking grain in that year. The costs so-derived were very detailed and the results that are relevant here are summarized in Table 2.1.

TABLE 2.1

PRODUCER OWNED/OPERATED
TRUCK COSTS WITH NO BACK HAUL
(1982)
(¢/ton-mile)

Haul Length (mi.)	12.42	18.64	24.84	49.70	145.15
Inc. Haul Length*	0.72	6.94	13.14	38.00	133.45
A. 10 ton truck					
1. 110 tons/yr					
a) New Truck	19.60	18.71	18.21	17.26	16.34
b) 5 yr. old	14.27	13.43	12.99	12.29	11.73
c) 10 yr. old	13.78	12.95	12.53	11.88	11.47
2. 331 tons/yr					
a) New Truck	19.25	18.19	17.55	16.09	14.46
b) 5 yr. old	14.15	13.25	12.76	11.84	11.06
c) 10 yr. old	13.73	12.88	12.44	11.69	11.17
3. 551 tons/yr					
a) New Truck	18.92	17.73	16.97	15.16	13.18
b) 5 yr. old	14.03	13.08	12.55	11.51	10.60
c) 10 yr. old	13.67	12.80	12.33	11.55	10.98

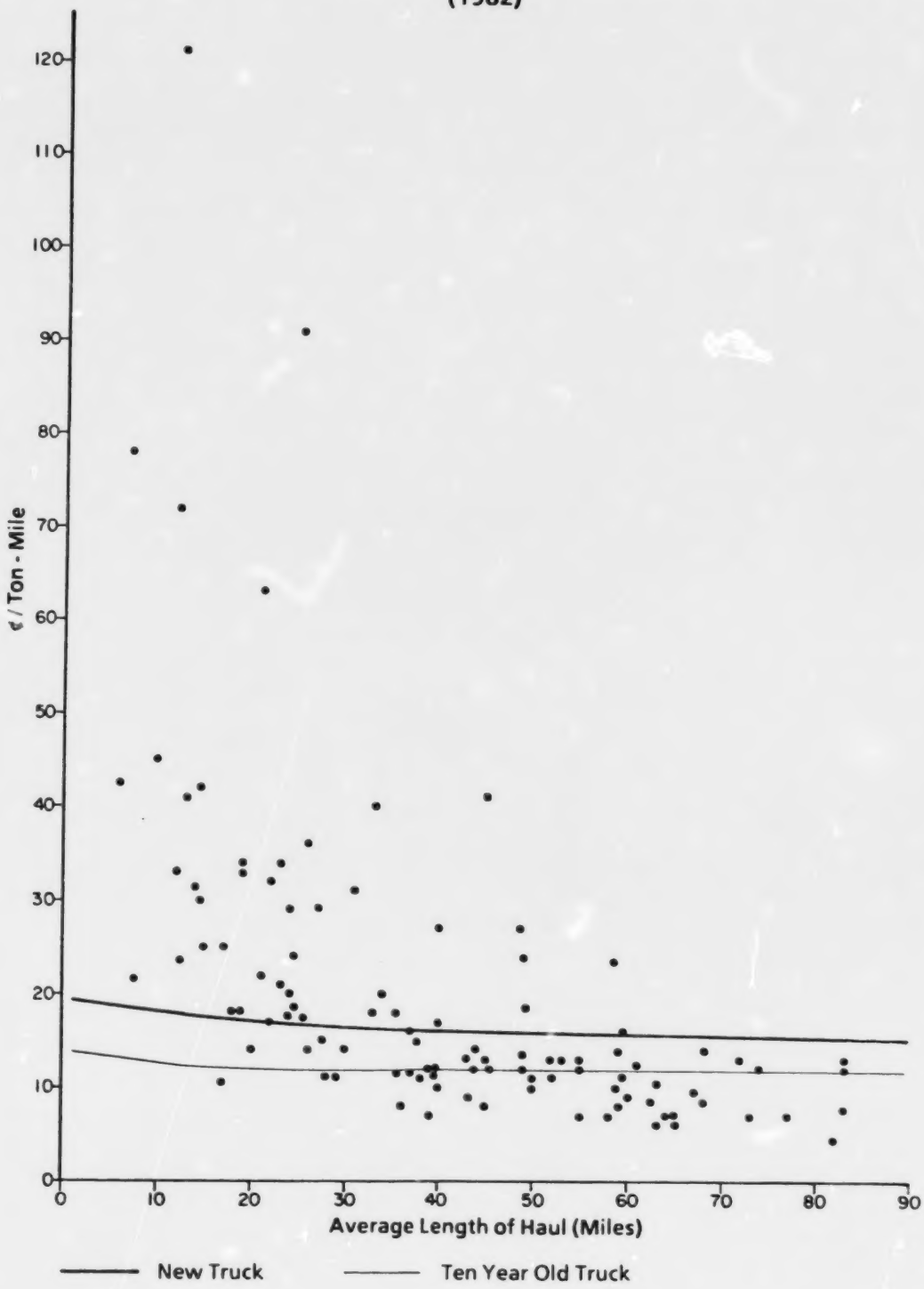
*Average Haul Length to B/L Elevator = 11.7 miles (Source: CN Submission).
**Cost is average for Alta/Sask/Man.

***Source: "Grain Trucking Costs in Western Canada" Trimac Consulting Services Ltd.

It is assumed herein that only limited back haul is possible thereby the trucking cost estimates are conservatively higher than they might actually be.

Figure 2.3 reproduces Figure 2.1 with the aforementioned truck cost estimates. From this it can be seen that, relative to the incremental grain truck costs for haul lengths equivalent to Prairie branch line hauls, there are a large number of branch lines that are more expensive. It should be nevertheless flagged that these truck costs are estimates that could vary

Figure 2.3
PRAIRIE BRANCH LINE COST PER TON-MILE
(1982)



widely from locale to locale. Moreover, the costs of incremental road maintenance are not included. We do not intend to go into these details here, however. This cost comparison, even with the unknowns which could increase the relative cost of trucking, demonstrates a potential for cost reduction through extended grain producer trucking and likely through grain trucking from offline elevators.

Non-Prairie Branch lines

With respect to non-Prairie branch line situations, on which the traffic is mixed, it is difficult to develop applicable truck cost estimates. It is likely that the trucking costs to handle non-Prairie main line traffic will be greater than in the Prairie situation, however, there is likely a greater chance of back haul. Insofar as, at this stage of analysis, the cost comparisons are very general, an order of magnitude cost comparison is all that is required. Considering the unit costs of non-Prairie Branch lines range over $10.00/ton-mile, the question of whether or not trucking is more cost-effective is clearly academic.

Not surprisingly, the view that trucking is an efficient substitute for branch line service is held by parties to this inquiry representing trucking concerns although many others are of like mind. These included: Association du Camionnage du Québec (which also indicated that applications to abandon were often merely a ploy to receive subsidization); University of British Columbia (which indicated that modal substitution in low density areas may be most efficient and that local operation might be preferred to operation by a large corporation); University of Manitoba (which also suggested that larger, more expensive trucks might do less damage to roads due to lower axle loading and less weight per inch of tire tread and might also entail less time in hauling since they would handle larger loads than currently handled by smaller trucks); Canadian Trucking Association (which stressed the savings to the railway from more efficient use of hopper cars as well as asserting that incremental road maintenance from increased trucking would be insignificant and that trucks should be allowed to compete for subsidy dollars); Cargill Limited; Clayton Sparks and Associates (who,

nonetheless, cautioned that road costs could become significant with heavy utilization if poorly designed); and the Saskatchewan Canola Growers Association (which supports a trucking subsidy).

Both CP and CN also supported trucking as an efficient alternative to branch lines and although CP was somewhat circumspect in its support ("...(trucking)...is the most likely alternative to provide low cost reliable transportation from low density lines"). CN was much more specific in its comments as follows:

> *"...there are potential transportation cost savings from extended producer trucking in specific cases with the advantages of avoidance of high cost, low density branch lines involving short grain pickup trains, shorter rail hauls and lower cost larger primary elevators with larger car spots and more frequent car allocations. The trucking should be flexible and simple...wait times at elevators would be reduced...probable savings for...many branch lines...would be realized...Commercial trucking from farms would be attractive at higher mileages (in excess of 25-50) miles as costs would be lower per ton-mile, demand on producers' time would be less and truck utilization would be greater...farm trucking for short and medium length hauls (25-50 miles) appears to offer many attracti e benefits for improving the efficiency and effectiveness of the grain collection and handling system."*

Comments on trucking by the Hall Commission were rather cryptic, although the increase in vehicle efficiency associated with an increase in vehicle size was noted.

Of course, trucking costs are a very important element in the determination of the feasibility of operating an offline elevator since the movement from these sites to online elevators would likely be accomplished by commercial trucking operations.

The potential establishment of offline elevators either through new construction or branch line abandonment, was recognized by the Hall Commission as follows:

"The Commission holds the view that provision for the liberal application of offline elevator operation will help to create a real understanding of the underlying economies and issues. This provision will not result in a proliferation of offline elevators and high total cost to the system for trucking and transloading; on the contrary, it will allow for more orderly rationalization by shifting the focus away from rail lines and allowing the industry to view the grain receiving and transportation elements as equal status determinants of system configuration...

...An offline elevator could be kept in an already established community. In this way the community would not suffer a tax loss. Producers, who were in the habit of delivering to that elevator could continue to patronize the local merchants, etc. There would be some extra use of the highway to the nearest point on rail. The Commission recognizes this and recommends that some compensation for this incremental traffic be paid to the Province to cover the cost of road maintenance for this additional traffic...(the extra costs of second elevation and trucking)...should, we recommend, be borne by the Federal Government. The justification for this form of subsidy is that if the line is kept in operation to serve the elevator, the cost of keeping it there would be many times greater than the extra elevation and trucking costs."

We tend to agree with these observations but with reservations concerning who should be liable for incremental road maintenance costs.

In the current Inquiry, CN feels that the offline elevator option deserves careful consideration as an alternative to the maintenance of an uneconomic branch line. Further, they believe that:

"...use of large, efficient trucks on existing roads shows evidence of being a lower cost alternative for the assembly and consolidation of a solid train movement...Advantages (include): net system cost savings, producer trucking unchanged, premature obsolescence of elevators minimized, greater train service frequency at rail head, more stable clearing of primary elevators, improved overall efficiency of railway operations, stimulation of local trucking interest."

Pioneer Grain Co. Ltd. indicated that if the Canadian Wheat Board allowed free switching of feed grain stocks, offline elevators might be able to compete with direct farm-to-market delivery. In general though, the above parties felt that the cost of second elevation would more than offset savings associated with incremental farm trucking costs to the nearest online elevator and, therefore, farmers would prefer direct trucking over retention of an offline elevator. This, of course, presumes that the operation would not be subsidized to a level less than the branch line subsidy that would otherwise be paid.

However, in certain frontier areas, it was felt by other parties that offline elevators could prove to be a viable alternative although some of these felt that, in this case, transportation to railhead and second elevation should be subsidized. Indeed, many parties felt that any losses attributable to changes in the status quo should be compensated to some degree out of the savings arising from these changes. Finally, the crucial criterion for other parties was that the selected option be the most efficient, least cost system possible and that this system should provide a stable transportation environment for shippers in keeping with the spirit of the National Transportation Act. If an offline operation could fulfill this criterion, Alberta Wheat Pool recommended that the associated costs should be included under the WGTA for rate determination and apportionment. With this we are in agreement.

2.5 Case Studies

We designated several branch lines to be investigated in detail with respect to cost comparisons of potential options namely: Acadia Valley, Avonlea, Central Butte, Furness, Inwood, Preeceville, Stettler and Winnipeg Beach.

We conducted a comparison of the verified costs of these branch lines compared to the costs of extended trucking by producers from the branch line elevator points to the closest delivery point on economic trackage. This analysis led to the following general conclusions; for a short line

operation to be the lowest cost option on the subject branch lines, the short line operation costs must be:

a) lower than the main line carrier costs, which, for the case studies, ranged from 6¢/ton-mile to over 90¢/ton-mile (1982 CTC approved costing methodology); and

b) lower than the average incremental cost of trucking from the respective branch line elevators to the nearest delivery point on economic trackage which, for the case studies, ranged from 11 to 13¢/ton-mile (1982 cost estimates for typical producer-owned trucks) plus costs of incremental highway/road maintenance, plus the cost of additional elevation in the case of off-track elevator-trucking options.

We were not able to assess the incremental road maintenance costs with confidence, however, there is evidence that this may not be as significant as some would allege it could be. With respect to the cost of additional elevation, although this would likely vary from case to case, there was evidence that it would be in the order of $1.50 to $2.00 per ton.

This analysis indicated that, for a short line to be the lowest cost option, it would have to operate at costs (1982 $) ranging from 11¢/ton-mile to 13¢/ton-mile to be less expensive than extended producer trucking and 14.6¢/ton-mile to 27.6¢/ton-mile to be less expensive than offline elevator operations — depending on the branch line in question. This analysis assumed: the cost of the second elevation to be a transportation charge; the cost of incremental highway/road maintenance to be insignificant or considered a right of provincial trucking operations to use the roads and thereby to be absorbed by the respective Provinces; and where the subject branch line was to be rehabilitated by Government, it would be so-improved without cost to the short line as it would not be a cost paid by the main line carrier operator.

The analysis showed that 5 out of 8 cases indicated that extended producer operated trucking had potential to be a lowest cost option to conventional branch line operation and that 4 out of 8 cases indicated that offline elevator-trucking was a significantly lower cost option to conventional branch line operation.

Although this type of oversimplified analysis is frought with a wide range of assumptions, and therefore rightfully subject to criticism, the analysis nevertheless shows extended trucking or off-track elevator-trucking to be potentially cheaper than conventional branch line operations in about half of the case studies, if incremental road maintenance was not significant.

As to the short line concept, we were not able to evaluate whether or not costs of conventional branch line operation would be reduced by a short line operator. However, it was ascertained that in roughly half of the case studies, the short line operator's competition for the lowest cost option was not conventional branch line operation but rather extended producer trucking or offline elevator-trucking.

Much more detailed analyses (including road maintenance costs) were conducted on these case studies by interested parties to this inquiry. They were, however, provided in confidence. From those, we conclude that:

a) offline elevator-trucking operations are substantially lower in cost than conventional branch line operations;

b) short line operations with rehabilitation are generally less costly than conventional branch line operations with rehabilitation;

c) short line operations with rehabilitation are generally more costly than conventional branch line operation without rehabilitation;

d) offline elevator-trucking is, in all cases studied, substantially cheaper than conventional branch line operations or short line operations; and

e) extended producer trucking is slightly lower in cost than offline elevator-trucking operations.

Conclusions

1) The legislative framework within which the merits of retaining or abandoning branch lines is too restrictive and as a result, it limits incentives for natural improvement of efficiency and cost-effectiveness of those high cost low density branch line operations and the ability to theoretically competitive short line and truck and offline elevator operations to compete for the associated feeder service on equal footing.

2) The dispersement of the branch line subsidy, intended to assist the shipper/consignee local to branch lines, is restricted to the main line carrier who operates that branch line and thereby unfairly prevents those non-main line carriers that could operate at lower cost from providing feeder services.

3) The U.S. experience with short line railways indicates that such opertions offer significant economies over the operation of branch lines by large main line carriers — particularly if the short line operator is able to obtain the labour wage and work rule flexibility achieved by successful U.S. short lines.

4) Prairie branch line costs span a wide range indicating, for those higher cost branch lines, a significant potential for cost reduction through use of alternate feeder services.

5) Uneconomic non-Prairie branch line costs are almost all at such a level as to render academic the question whether alternate feeder services would be of lower cost.

6) The greatest potential for successful short line operation is on those branch lines which currently are of the lower cost, longer, higher traffic density variety or which hold potential to attract high density traffic if costs are lowered.

7) The greatest potential for trucking compared to non grain-dependent branch lines and offline elevator-trucking is for those branch lines which currently are of the higher cost variety and where the incremental cost of road maintenance is proven to be relatively low or insignificant.

8) The greatest potential for the retention of branch lines for which the unit revenue (¢/ton-mile) less the unit costs (¢/ton-mile) of existing branch line operations is relatively small.

9) Most parties to the inquiry who commented on relative merits of alternatives to traditional branch line operation, including the main line railways, agreed that trucking would, in general, offer cost savings and that the potential for short line railways offering significant system cost reductions and efficiencies was low.

10) The most difficult aspect of quantifying benefits from the trucking or offline elevator-truck options is the determination of the cost of incremental highway/road maintenance resulting from traffic shifts from abandoned branch lines and who is liable for same.

11) It is fair to the producers of grain in frontier regions to be afforded off-track elevator-trucking subsidies as if the trucking and secondary elevation costs were costs associated with a branch line, however, eligibility standards to avoid abuse must restrict such subsidy payments.

3.0 MECHANISMS FOR IMPROVEMENT

3.1 General

We have identified the cost reducing potentials of the options to conventional branch line operations. We have also touched on the failings of the existing legislation to permit equitable treatment of these options and thereby to create incentives for natural rationalization to a lowest cost, more adequate and efficient transportation system. Furthermore, we have pointed out the lack of mechanisms to accomplish natural rationalization of the railway network's feeder system. Herein, we wish to address this latter matter in more detail, to be followed by an itemization of the necessary legislative changes in the form of recommendations.

In order to properly evaluate the need for specific legislative and procedural change, it is first important to develop a framework of modern mechanisms with which Government could better implement the objectives of the National Transportation Policy with respect to railway branch lines. We believe that there are four cornerstones to this framework; namely mechanisms to provide:

a) the users of branch lines and the public with the information sufficient to evaluate which feeder options are the lowest cost;

b) a means for users of branch lines to elect to employ the lowest total cost option without physical or economic penalty;

c) a means for short line entrepreneurs and non-rail mode operators effectively to compete for the subsidies, or a part thereof, that would otherwise be paid to the main line railways for branch line service, when those options are the lowest total cost alternatives; and

d) a means to divert traditional branch line subsidies to the proven lowest total cost option without unfair treatment of the main line railways and without abuse to the public purse.

3.2 Information Disclosure

As shown earlier, the public has and will likely continue to pay for the deficits of uneconomic, low traffic density, branch lines through Government regulated capital and operating subsidy. The public therefore has a right to know on what such monies are being spent, without that information being obscured through over-aggregation. Moreover, the rationale for such subsidies is mainly to ensure shipper access to adequate transportation services at a reasonable price for public interest reasons. The shipper therefore has a right to know what is being spent on his behalf so as to assess the implications of that expenditure. This latter point is all the more important to the Prairie grain producer, in that the branch line subsidy portion of the WGTA payments has the potential effect of artificially retaining the highest cost feeder option for the movement of grain from the primary elevator to the main line junction. Thereby, this situation has the effect of potentially making the producer's share of the grain transportation bill higher than it might otherwise be. The users of non-grain dependent branch lines do not have this problem, however, they should be fully aware of the costs of the services provided as well. To be relevant, the cited information should be provided on a branch line specific basis.

From another point of view, and in the context of Transportation Policy to ensure maximum use of available modes at the lowest total cost, subsidies to branch lines retard competition by Government actions or legislation which artificially reduce the rates or proportion of revenues attributable to branch line service. The mode or transport operator who might, in a natural or commercial environment, compete for feeder services to main line railhead is forced to compete with a rate that is artificially low by virtue of Government intervention. Insofar as Government pays for a relatively large part of the price of branch line services, it should also

have the right to disclose what it is paying and the potentially competitive mode has the right to know to what degree it is being restricted from competing due to such payments.

There was mixed reaction, amongst parties to this Inquiry, with respect to the subject of cost disclosure. Problems were identified in the following two areas:

a) the impact of cost disclosure on the competitive position of the main line railways; and

b) the impact of cost disclosure on shippers' perceptions.

It has been normal practice for the Commission to maintain confidential railway costs provided it by the railways in order to determine subsidy levels and other matters. Provisions for this and penalties for publication without leave are part of the Railway Act. Provisions are also available to disclose such information when it is deemed in the public interest to do so. Indeed, costs and losses for movements from/to uneconomic branch lines are disclosed at abandonment hearings. The railways nevertheless argued, although not with great force, that cost disclosure for each branch line would commercially hurt their respective bargaining positions in respect of market rate negotiations with other shippers. Such cost knowledge would allegedly increase the shipper's ability to evaluate the specific costs of the service provided and thereby potentially could reduce railway profits over time. We considered this aspect very seriously, for it is a most serious matter. In light of the foregoing logic, with respect to the right to know, and in consideration of the implications of knowing, we conclude the following:

a) it would be unreasonable for anyone to argue that the average unit costs of a low traffic density branch line (e.g., $/ton-mile) bears much relationship to the costs of servicing the bulk of the railways

commercial traffic and conversely it would be easy to counter-argue such a position in a commercial rate negotiation;

b) much of the subject cost information is already accessible through a review of branch line abandonment decisions;

c) negotiating shippers can purchase service cost analyses from expert consultants in the field;

d) a published breakdown of costs as to labour, fuel, superintendence, etc., would, however, not be fair;

e) a disclosure of average $/ton and/or ¢/ton-mile on a branch line by branch line basis would not damage the railways' rate bargaining position or otherwise be prejudicial to the railways' profit making ability; and

f) such cost disclosure should, however, be limited to those branch lines for which there has been an application for abandonment in the past or present, to which there has been or is a capital subsidy, (e.g., rehabilitation payment) or operating subsidy, and/or to which the provisions of the WGTA apply.

With respect to the impact of cost disclosure on the perceptions of the shipper, it was argued that this would "pit one grain producer against another and one grain producing area against another". This was apparently based on the fact that grain-dependent branch line costs vary substantially from one line to another, and yet the rate paid by the producers is averaged across the system under WGTA. Cost disclosure would identify who is theoretically cross-subsidizing who and what region is cross-subsidizing what other region. The principle of equity of treatment of producers in the grain

business, in terms of equal per ton-mile rates for transporting grain, has long been a building block of that industry — first enshrined in the Crow's Nest Pass Agreement and later in the WGTA. The implications are well known and with those we have no problem. Even if the aforementioned alleged impact does occur upon cost disclosure, we do not believe that that would be sufficient reason to obscure knowingly the information that might lead to a better realization of lower overall transportation costs for grain. Indeed, we understand that the grain producer is not so naive as to believe that the rate paid for grain transportation services on each of the myriad of routings is proportionately equated to the costs thereon. Neither do we believe that the producer is not aware, at least to some degree, as to which branch lines and which routings are high costs and which are low costs. What the producer does not know specifically are the cost differences in sufficient detail to make rough site-specific comparisons with other transportation options — indeed, one of which is extended producer trucking to non-branch line railhead.

The Hall Commission commented on this issue:

> *"The Commission is concerned about the masking of marketing costs which has the effect of inhibiting the development of better marketing technology. Again, the Commission was impressed with the general knowledge of farmers about their production costs and were also impressed with the fact that many producers making presentations were unable to provide information on the level of their local elevator tariffs or the statutory rate from their own delivery point, let alone other costs and levies such as terminal charges, cleaning charges, drying, Wheat Board costs, etc. It became obvious that greater efforts should be put forth by the grain companies, extension agencies, the Canada Grains Council, Canadian Grain Commission and the Canadian Wheat Board to acquaint these grain producers with marketing processes and costs."*

Furthermore, the Hall Commission made the recommendation that:

> *"Elevator companies be required to show the applicable tariffs for handling, cleaning, storage and freight on the producer's cash ticket."*

In the context of the current Inquiry, the benefits associated with informing the producer of the true costs of transportation were also raised, for example, by Western Wheat Growers Association who maintain that minimum regulation and maximum exposure to all costs will cause farmers to produce the most efficient rail system. They advocate that the cash grain ticket should show the gross amount of transportation and elevation costs; there is a need for a more realistic rate setting mechanism which would allow for rate variability; and, plebiscites, with full cost disclosure, should be held to determine abandonments. In addition, they argue that farmers should be paid the Crow benefit since paying the railways just maintains the current system. This position is also taken by the Saskatchewan Canola Growers Association. This latter matter was dealt with by the recent Hall Committee report and therefore we will not delve into it here.

If all branch lines were operated as short lines, for instance, much of the above-mentioned cost information would be readily available. The short line rate or division of rates would likely be well known.

We also believe that branch line rehabilitation costs should be publicly disclosed in the context of the economic value of same in terms of net transportation costs on the subject branch line haul. At present, we do not believe this significance is well understood. Arguments for rehabilitation tend to involve a "me too" attitude, irrespective of cost, or one of "if you don't rehabilitate my line you'll probably abandon it" even though rehabilitation may render the operation more cost-ineffective compared to other feeder options. Most parties agreed that planned rehabilitation should only occur where it is cost effective. We conclude that this criteria should be rigorously enforced.

"Railway costs" can mean many things depending on the level of detail in which they are presented. At the level of detail used by costing experts, the figures would mean little or nothing to the layman. Indeed, disclosure of cost at this disaggregate level may harm the railways' market position. Perhaps the simplest type of cost disclosure is in the form of the $/ton cost from/to all delivery points on branch lines. However, such simple

presentations would result in a tremendous volume of tables. A compromise is the presentation of costs in terms of average ¢/ton-mile for each branch line in question. Thereby the average cost/ton could be easily estimated between delivery points on a branch line and its junction with other trackage.

In the Commission's normal work related to the administration of branch line subsidies and to the WGTA, it is privy to such costs. The railways provide the basic cost estimates and Commission staff verify same according to Commission approved methods. Such costs could therefore be gathered, verified and published annually by the Commission, along with the cost of rehabilitation (past and pending) on an annual basis without major resource consumption.

The notion of treating elevator costs as transportation cost elements is one that has arisen from time to time throughout this inquiry. Indeed, the elevator tariff is a cost of moving grain to the export point. On a local basis, it is clear that elevator costs vary from one elevator to another dependent on elevator characteristics (e.g., age, capacity, turnover, etc.) and that tariffs do not necessarily reflect elevator-specific costs because of cross-subsidization practices. Although we would encourage the disclosure of such costs, from the point of view that such may assist in the rationalization of the branch line system and in attaining the lowest total cost of transportation of grain, we find no rationale for forcing such to happen — particularly as elevators are not subsidized by Government.

3.3 Abandonment By User Election

At present, only the railway owner of branch lines may apply for abandonment of same — irrespective of cost or of theoretical competition options. To a large degree, this makes sense, because the subsidies are only available to those carriers and more importantly, the branch lines are their property. If, however, all feeder options were eligible to benefit directly from such subsidies, if such options are the lowest cost alternative, it merely makes more theoretical sense to permit the user to choose, through providing the user the right to apply to have a subject branch line abandoned

in favour of a lower cost option without physical or economic penalty. Practically, however, there are problems with this suggestion.

Granting users the right to apply for abandonment of an uneconomic line so that an alternative lower cost service could compete for the subsidy that would otherwise be granted the branch line parent is tantamount to granting the right to the user to expropriate the railway's property. Another means of attaining the goal of the users choice for lower costs must therefore be found.

To us, the other means is granting, those who pay, the right to apply for the Government portion of payment (i.e., subsidy or Government share of WGTA payment) to be diverted to a lower cost system. If then the subsidy, direct or indirect, no longer is granted the railway for operating the branch line, that railway should be permitted to abandon the branch line or otherwise sell or dispose of its properties as it sees fit under existing provisions of the Railway Act and as authorized by the Commission. This provision should also be granted the users/shippers/consignees on non-grain dependent branch lines.

We therefore believe that it would be in the public interest to have a mechanism whereby users of a particular branch line — particularly those or those groups who represent a majority proportion of traffic thereon (i.e., the elevator companies or groups of major shippers) to opt for a lower cost feeder system by having the right to apply to have a branch line direct or indirect subsidy diverted in part to the chosen lower cost option, whether or not the branch line is "protected".

Such applications should be made to the Commission in the form of a business proposition with appropriate projections as to the physical and cost/rate characteristics of the options and other criteria set be commercial agreements in principle, clearly demonstrating the merits of the alternative feeder service. Required subsidy levels should also be estimated noting the rationale thereof and they should otherwise adhere to guidelines the Commission may consider essential.

Such applications could be joint applications by the interested parties including the users, alternative transportation company and associated Province.

In certain circumstances, the application could be for a two phase diversion: first a cessation of conventional branch line operation for a period of time not to exceed, for instances, two (2) years to permit a demonstration project or experiment to prove the merits of the change in service — particularly when new technologies are involved. In such cases, and for Prairie branch lines, use of the System Improvement Reserve (S.I.R.) fund should be considered as the funding source for the demonstration project in concert perhaps with the associated Province--not dissimilar to proposals made by the Province of Saskatchewan. On the other hand, we would advocate in most cases that there should be but a one phase procedure: a decision to divert subsidies followed immediately by an abandonment of the branch line so as to economize on the Government assistance to the users without penalty to them.

3.4 Abandonment By Competing Carrier

If carriers, other than main line carrier operators of branch lines, were eligible for subsidy as noted earlier, on the basis of their relatively lower total cost, it seems reasonable that such potential competitors should have the right to present applications for diversion of the branch line subsidy to their operations, as well. This should be via a mechanism similar to that described under the heading "Abandonment by User Election".

If either a user or competing carrier applied for subsidy diversion, all parties interested should, of course, be granted right to intervene and the normal process of public notice, hearing, decision and subsidy administration would follow.

3.5 Subsidy Diversion

From all the foregoing, we have come to a position that there is merit in providing mechanisms for the intiation of change to the traditional way of dealing with branch lines. However, the result of such change would likely be nil, unless there was also a mechanism to permit that change without penalty to the branch line user or the main line railway operator of the branch line and without potential for program abuse. To resolve this issue, consideration should be given to a means and criteria to alter traditional subsidies and subsidy procedures.

In the case of Prairie branch lines, the deficit thereon is paid in part by Government and in part by the grain producer as a whole, through the provisions of the WGTA. The effective mileage rate applied to grain dependent branch lines has been shown to be far less than the unit cost thereon — in some cases, by more than an order of magnitude. A shift of patronage to an alternative feeder system would therefore likely result in a substantial cost penalty to the grain producer — even though that alternative may be a lower cost option. The producer should not be so restricted or penalized for making the logical decision. Moreover, that decision should not be made for him by the actions or inactions of Governments, elevators or railways. It is the grain producer that pays for part of the cost of inefficient low density branch lines unlike in the case of non-grain dependent branch lines.

For non-grain dependent branch lines, the subsidy is more direct in that it is paid through the Railway Act as compensation for an imposed public duty. Although non-grain dependent branch line users do not proportionately share in paying for the branch line deficit as do the grain producers, we believe they should be granted equal rights to seek the lowest cost most acceptable feeder system.

Subsidies to both Prairie and non-Prairie branch lines are, as shown earlier, assistance to the users, as compared to subsidies of the railways. It is therefore reasonable to consider providing that assistance

to the users in the form of subsidies to those feeder systems that the user chooses. If that choice is not for conventional branch lines services or for some other rail or non-rail mode and that option is less expensive than the conventional branch line operation, a potential exists not only for cost reduction but also subsidy reduction at no penalty to the user. This is, however, only valid if, as a result of choosing a non-conventional branch line service, the main line carrier is relieved of responsibility and the public is relieved of having to compensate the main line carrier for operation thereon.

Apart from the economic, subsidy and traffic type differences between grain dependent and non-grain dependent branch lines, there is a distinct difference arising from the fact that many Prairie branch lines have been "protected" from abandonment to the year 2000, by Governor-in-Council Order. In this context, that Order essentially is an agreement to subsidize those protected lines to the year 2000, whereas non-protected uneconomic branch lines may be abandoned at any time with Commission approval. Another difference is the agreement to rehabilitate certain Prairie branch lines, thereby abandonment of those lines is unlikely in the near future. Indeed, we conclude that a recently fully rehabilitated branch line should be protected from abandonment so as to protect the public's investment thereon. Furthermore, there is a difference between those branch lines to which the WGTA is applicable in that the diversion of subsidy would constitute a diversion of required revenue from the WGTA, as compared to the diversion of subsidies paid to compensate for an imposed public duty.

Considering all of these factors and the evidence before us, we believe that it is definitely warranted to subsidize less expensive options to grain dependent branch lines through the reallocation of required revenue under the WGTA and that changes to that Act should be made to permit same so that the producer pays no more than he otherwise would have to with the uneconomic branch line in place. In fact, as the abandonment of a branch line in favour of a lower cost option the grain producer, as a whole, would pay a marginally lower rate. With respect to the diversion of subsidies from

traditional branch lines under the Railway Act there are, however, some reservations.

The traffic density of non-Prairie branch lines has shown to be as low as their costs are high. Relative to grain dependent lines, the effective subsidy per ton moved is much higher. There is a greater possibility for abuse of the potential for subsidy diversion on such lines and the administration of such diverted subsidies would be much more difficult. For example, shippers on a non-grain dependent branch line may ship but a tiny fraction of their traffic on the subsidized line primarily to maintain lower truck rates for the majority of their traffic. In keeping with the principle of attaining lower cost through subsidy diversion without penalty to the shipper or abuse of public funds, it would not seem reasonable to subsidize traffic that otherwise would move by an alternative mode. We therefore conclude that such subsidy transference should apply only to the traffic diverted from the uneconomic branch line to the point where the branch line would no longer be necessary and, hence, its subsidization would no longer be required.

There are a number of ways to accomplish the goal of lower cost through reallocation of subsidy without penalty to the user and without potential abuse of the resultant subsidy system.

One extreme would be to grant the Commission the power to make user-specific subsidy programs upon application for subsidy diversion or abandonment to permit a lower cost alternative.

Another extreme would be to legislate a comprehensive set of standards and criteria for subsidy allocation to which the Commission would rigidly be bound.

We believe that neither extreme is ideal, however, both extremes form the basis of a practical and yet flexible procedure. We believe that a legislated set of general standards should be set as a guideline with Commission discretion to alter same, in special circumstances as may arise

from the evidence at branch line specific hearings. In particular, we believe these general guidelines should be as follows:

1. The initial subsidy ceiling to a lower cost non-conventional branch line option should be the difference between the allocated revenue per ton (by mileage) to the branch line and the cost per ton on that branch line operation according to Commission approved costing methods that apply at the time of application. The aggregate cost of the subsidy pertaining to a short line operation on the branch line or a trucking or offline elevator trucking alternative should not exceed this subsidy ceiling per ton, in the initial fiscal year of subsidy payment.

2. The per ton subsidy ceiling should then be adjusted each year by an index of cost/ton increases on all uneconomic railway branch lines.

3. The subsidy paid to the lower cost option carrier should be paid to the main line railway and that amount should be determined by alternative feeder service(s) rates annually approved by the Commission to yield a revenue to the alternative feeder service(s) up to but not exceeding the subsidy ceiling in light of the costs of the alternative feeder service(s) ensuring that no undue profits are made by the alternative feeder service(s).

4. Within the bounds of the above, the Commission shall set specific terms and conditions as are deemed warranted based on the evidence pertaining to each case so as to avoid abusive treatment of the subsidy program with particular attention to ensure only

traffic that would otherwise be moved by branch line is subsidized.

5. In the case of offline elevator trucking, the incremental cost of second elevation, as approved by the Commission, should be treated as part of the transportation cost.

6. In the case of offline elevator trucking, the subsidizable trucking rate should only be for service from the offline elevator to the closest online elevator irrespective of ownership. Movement to a more distance elevator is acceptable but the added cost should not be eligible for subsidy.

7. In all other cases, diverted subsidy should also only apply for movement from traditional branch line delivery points to the closest rail head point.

8. Insofar as the initiation of subsidy diversion would be from local concerns, incremental road maintenance costs, if any, although a consideration in the determination of relative total costs, should not be considered a transportation cost eligible for Federal subsidy.

9. All subsidy diversion applications should be processed by the Commission within six (6) months from the time of application or as may be agreed to by the applicant(s).

For example, if an offline elevator-trucking option is the proven low cost option, then the indexed actual loss per ton on the branch line to be abandoned, at the time of the related hearing, would be the subsidy

ceiling per ton moved by the alternative feeder system. The elevator company operating the offline elevator would contract for trucking to the nearest railhead delivery point. That trucking rate would be approved by the Commission, in full knowledge of related costs and profit level, as would the incremental second elevation cost. The subsidy would be equated to the rate plus elevation cost for the grain moved from the offline elevator to the nearest delivery point. It would be paid to the offline elevator by the main line railway. The offline elevator would pay the trucking concern(s). The subsidy would derive from the WGTA estimated eligible cost. The total annual subsidy per ton would not exceed the indexed per ton subsidy ceiling. The truck and secondary elevation costs would be annually approved by the Commission as would the related subsidy package. The railways would include the annual cost of trucking and second elevation in the respective WGTA estimated eligible railway costs.

In the case of a grain-dependent short line, a similar subsidy system would evolve. The short line would be treated as the trucker in the offline elevator-trucking option noted above, except there would be no secondary elevation cost. Thereby, division of rates issue is not relevant for grain traffic. Division of rates for non-grain traffic on grain-dependent short lines should be negotiated between the short line and the connecting railway.

In the case of a non-grain dependent short line or a non-grain trucking operation the same procedure would apply except the railway would pay the shipper to truck or the short line rail to deliver to the nearest conventional railhead delivery point on the basis of rates annually approved by the Commission not to exceed the subsidy ceiling and not to yield an undue preset profit.

In all cases, special circumstances shall be considered by the Commission, at the time of application, in the approval of rates and maximum revenues derived therefrom but shall not give rise to increase in the subsidy ceiling. One obvious special circumstance would be the claim for subsidy on traffic that would not otherwise have moved by the branch line in question.

Any subsequent change to the decision and its terms and conditions should only take place after a due public notice and hearing by the Commission.

3.6 Other Considerations

Five Year Review

The existing legislation dealing with branch line abandonments requires a five year review upon a decision to retain and subsidize. A number of parties to this inquiry suggested this results in a detrimental impact on pending investors who require plant-gate or local access to rail service. This five year review interval should be retained as a guideline, however, the Commission should be permitted to extend same if special circumstances warrant — particularly if the pending investor guarantees rail usage for a majority of shipments upon materialization of the investment.

Tourist Train Operations

Tourist train operations on branch lines are servicing a recreational or tourist function with Provincial jurisdiction and therefore are not eligible for Federal subsidy diversion provisions noted in the foregoing.

Government Initiated Rationalization

The existing provisions for railway initiated application for abandonment and the suggested provisions for subsidy diversion should be complemented by Government initiatives to seek alternative feeder services to the higher cost lower density protected branch lines. Such initiation should be restricted to identifying 10 percent of protected branch lines having the highest unit cost which have not been rehabilitated as yet, treating pending rehabilitation costs (annualized) as a service cost and seeking tenders for alternative lower cost services, within the guidelines for the subsidy diversion procedure. No action for subsidy diversion should take place

except after due public notice and hearing by the Commission in similar form to the procedures noted for user/carrier subsidy diversion applications.

Rehabilitation Constraint

Whether economically justified or not, a rehabilitation program has taken place on some Prairie branch lines, in part. That investment is made and where essentially complete those rehabilitated sections of branch line should not be subject to the subsidy diversion procedure until the year 2000.

Retention Without Operation

In situations where the branch line parent applies for abandonment under existing legislation, the Commission should be permitted to require retention without operation until evidence of reasonable traffic levels is forthcoming. Thereby, subsidy for this imposed public duty should be restricted to minimum "mothballing" costs and that should not exceed a period of five (5) years or a lesser time as the Commission may approve after which abandonment should be automatic.

Forced Branch Line Construction

On its own initiative, the Commission should be empowered to require by order the construction of connecting branch lines to be paid for by funds remaining under the Prairie Branch Line Rehabilitation Program and for the System Improvement Reserve Fund, if such construction is shown to be cost effective. This would avoid the current option of abandonment permission with conditions of other works being constructed — a questionable legality. However, where this involves use of pre-designated funds no action should be taken without due public notice and hearing.

Frontier Elevator-Trucking

The process of subsidy diversion should be extended to elevator companies willing to construct a viable offline elevator(s) at location(s) in

excess of 50 miles from railhead. In such circumstances, the procedure should be as if there was an application for subsidy diversion from an existing branch line to an offline elevator-trucking operation. The determination of the subsidy ceiling per ton, however, should be based on Commission determination in light of the principles of equity of treatment relative to the treatment afforded offline elevator-trucking operations in more centralized areas.

Demonstration Projects

In cases where technological innovation appears to hold promise of feeder system cost reduction — such as in the case of road/rail power units — the use of a demonstration project may be warranted prior to making irreversible decisions. Such projects could take the form of: a) technical feasibility tests in a controlled environment; or b) economic viability tests of the operating concept ensuring there are no hidden costs. In such matters, it is advisable not to contemplate demonstration projects on relatively known systems such as offline elevator-trucking operations as the risks of error in estimating technical feasibility and economic viability in such operations is minimal. Moreover, it is advisable to embark on such matters through cost-sharing schemes with the interested parties including, for example, the Federal Government, Provincial Government, potential operator, equipment supplier and/or users. No such experiments should be employed to retard natural rationalization and therefore should be carried out and reported on within a two (2) year period as of the decision to proceed.

Implementation

Apart from the need for detailed legislative drafting the implementation of the aforesaid mechanisms will require dedicated attention by a single body. It is suggested that an Office of Alternative Rail Usage be formed within the Commission both at Headquarters and the Western Division to assist in the legislative drafting, regulatory and procedural rule drafting and subsequently to provide the necessary investigatory,

coordination, hearing support and monitoring functions related to these new mechanisms. The Office of Alternative Rail Usage in Eastern Canada to be located at the Commission's Headquarters, the office of the Alternative Rail Usage in Western Canada to be located in the Commission's Western Division Headquarters.

Consideration of the Hall Committee Recommendations

The purpose of the Hall Committee of Inquiry on Crow Benefit Payment was expressed in Section 62 of the Western Grain Transportation Act as follows:

> *"The Committee shall examine all matters that, in its opinion, pertain to the method of payment in respect of grain transportation that would be most conducive to agricultural development in Canada."*

In addition to its legislative mandate the Minister of Transport directed the Hall Committee to examine the payment issue in the context of the following four criteria:

a) Resource Neutrality
b) Equity
c) Efficiency
d) Administrative Feasibility

After wide consultation, the Hall Committee recommended that the government commitment under the WGTA be paid directly to producers on the basis of each producer's net sales of eligible grains in each crop year. Further recommendations included disbursement of the Grain Transportation Refund (GTR) by the Western Grain Stabilization Administration and a requirement that the railways be required to post performance bonds to meet performance requirements established by Grain Transportation Agency.

Purely as a matter of economics, the recommendations of the Hall Committee are attractive from a transportation perspective, because they

remove artificial incentives for transportation of grain by the rail mode and would facilitate rationalization of the western branch line network. Apart from domestic policy consideration, however, a "pay the producer plan" must also be considered in the context of international trade. The world market for grain is forecast to become much more competitive for producer nations such as Canada in the years which lie ahead. This factor has led to increased sensitivity amongst exporting nations to financial measures designed to stimulate agricultural exports. Since some of Canada's grain producing competitors such as the United States of America and the European Community are also important trading partners, broad questions of trade policies and the possibility of retaliatory measures for direct producer subsidies must be considered by government, though they are beyond the scope of this Inquiry.

Nevertheless, payments to railway companies as compensation for the provisions of an essential public utility should, in all probability, continue to be compatible with existing trade agreements and conducive to sound trading legislations abroad.

In our opinion, an approval or disapproval of the "pay the producer" suggestion would not substantially alter the principles we have outlined under "mechanisms for improvement". However, approval of this approach would alter the way in which our suggested principles would be implemented. If the pay the producer approach is approved, we suggest that the effective subsidy for the existing branch line or its alternative, be extracted and administered directly to the elevator company/mainline railway who, in turn, would pay the trucking company/short line railway for its share of the transportation feeder service.

3.7 Conclusions

The foregoing outline of the framework for mechanisms to improve feeder system cost effectiveness are indeed complicated and require legislative change to the WGTA and the Railway Act. A policy framework for branch lines and alternative feeder services within which such legislative changes should be made is outlined in the following section.

4.0 POLICY FRAMEWORK FOR LEGISLATIVE CHANGE

4.1 General

Throughout this report we have drawn conclusions within the context of supporting arguments. From this a broad policy framework work evolves which also forms a sound basis for legislative change requirements.

4.2 Policy Framework

4.2.1 Overall Branch Line Policy

The overall branch line policy should foster principles of informed branch line user choice of alternative feeder services with freedom to implement choice without physical or economic penalty and of unrestricted eligibility to lowest total cost alternative feeder services for subsidy without undue harm to the traditional branch line owner/operator and without unfettered access to public funds.

4.2.2 Branch Line Cost Disclosure

For the branch line user to be informed, at a sufficient level of detail to make knowledgable choices, a policy promoting cost disclosure should be struck. In particular:

a) the average unit costs (¢/ton-mile) of each railway branch lines which is being subsidized directly, as an imposed public duty under the Railway Act, or indirectly, through the provisions of the Western Grain Transportation Act, should be publically disclosed on an annual basis;

b) the average unit cost (¢/ton-mile) of each alternative feeder service which is being subsidized

directly or indirectly should be publically disclosed on an annual basis; and

c) the economic value of capital subsidies such as pertains to actual and planned rehabilitation (in terms of ¢/ton-mile) should be publicly disclosed for each branch line on an annual basis.

4.2.3 Informed Choice

An open policy of assistance in the physical and economic evaluation of alternative feeder systems compared to traditional branch line services should be followed. In particular, assistance should be provided in the following areas:

a) analysis of physical and economic implications of choosing alternative feeder services;

b) coordination with affected parties such as shippers, railways, provinces and interested alternative feeder service concerns; and

c) promotion and financial assistance for technical feasibility and economic viability evaluations of innovative technologies in the area of equipment, power units and operations related to feeder services.

4.2.4 Implementation Freedom

A responsive policy to ensure ease of implementing choice through granting rights to interested parties to apply for a diversion of subsidy to alternative lowest total cost feeder services is required. In particular:

a) the right to apply for subsidy diversion should be granted to users (e.g., grain producers, elevator companies or others who traditionally employ branch line services), or any consortium of these and any other interested parties;

b) the right to intervene for or against such an application should be granted any interested party through the public hearing process; and

c) in the event the alternative feeder service is found to be the lowest total cost option, the subsidy, or part thereof, that would otherwise be granted the traditional branch line operator should be diverted to the alternative feeder service party under the terms and conditions set by the Commission, and the traditional branch line operator should be permitted to abandon, sell or dispose of its property as it sees fit and as is authorized by the Commission.

4.2.5 Choice Without Penalty

A protective policy to ensure that a subsidy diversion does not result in a physical or economic penalty to the traditional branch line user is required. In particular:

a) the rate paid by the user to the alternative feeder service should not exceed the rate that would be paid if that user employed the traditional branch line service;

b) any detrimental service changes should be taken into account in the setting of the alternative feeder service rate;

c) the required revenue for all subsidized alternative feeder services should be approved by the Commission and the subsidy paid should be the difference between the approved required revenue and the rate applicable to the traffic of the user that would otherwise move by the branch line.

4.2.6 Unrestricted Eligibility

A receptive policy to ensure equality in eligibility for subsidy paid to assist the user through granting rights to alternative feeder service operators to apply for a diversion of subsidy from traditional branch line services is warranted. In particular:

a) the right to apply for subsidy diversion should be granted to alternative feeder service operators (e.g., short line railways, truckers and offline elevator-trucker operators or any consortium of these and other interested parties);

b) the right to intervene for or against such an application should be granted any interested party through the public hearing process; and

c) in the event the applicant is found to be the lowest total cost option and it is found to be in the public interest, the subsidy, or part thereof, that would otherwise be granted the traditional branch line operator, should be diverted to the applicant under terms and conditions set by the Commission and the traditional branch line operator should be permitted to abandon, sell or dispose of its property as it sees fit and as is authorized by the Commission.

4.2.7 Subsidy Fetters

A protective policy which would fetter the subsidy levels to alternative feeder services so as to avoid abuse of public funds and to ensure a natural rationalization of the feeder system is advisable. In particular, subsidy to alternative feeder services should:

a) only be paid in respect of movements to the closest remaining railhead delivery point;

b) only be paid for the movement of traffic volumes that would have otherwise moved by the branch line;

c) not be paid for incremental road maintenance where such is alleged to occur and when application for subsidy diversion is local in origin although verified incremental road maintenance cost estimates should be considered part of the total cost of alternative feeder service in the evaluation of the lowest total cost option;

d) where applicable, verified incremental second elevation costs, but not tariffs, should be considered a transportation cost eligible for compensation;

e) not exceed, in any year the per ton subsidy paid to the traditional operator at the time of the subsidy diversion indexed for each subsequent year to account for all remaining uneconomic branch line per ton cost increases;

f) not grant the alternative feeder service operator an undue profit as deemed by the Commission; and

g) adhere to the terms and conditions as may be set by the Commission at the time of the subsidy diversion based on the merits of the application.

4.2.8 Government Initiative

A policy is warranted whereby the Federal Government grant the Commission the right to encourage rationalization of the highest cost branch lines (in terms of ¢/ton-mile) by seeking tenders for alternative lower cost services in accordance with the above-noted policy guidelines and to require subsidy diversion in the event lower cost alternative feeder services are found, except that consideration shall be restricted annually only to 10 percent of the outstanding branch lines that are directly or indirectly subsidized by Government and that are the highest cost branch lines that are not fully or shortly to be fully rehabilitated.

4.2.9 Equality of User Treatment Under WGTA

A policy of equality of treatment, with respect to feeder service subsidy is required, to those grain producers who do not now have local access to railway branch lines located in what could be referred to as the frontier regions whereby, if an elevator company is willing to construct a viable elevator and whereby that elevator is in excess of fifty (50) miles from the closest rail head.

4.2.10 Equality of Carrier Treatment

A policy of retaining the conventional branch line owner/operator rights to abandon branch lines considered by them to be uneconomic and of maintaining main line carrier obligations otherwise related thereto and also to ensure that all alternative feeder systems subsidized by the Federal Government and under Federal jurisdiction to be obliged as if they were main line railway operators of branch lines is essential.

4.2.11 Accountability

A policy of accountability with respect to aforementionned policies, is advisable as follows:

a) The Commission shall decide on all applications for abandonment and subsidy diversion within six (6) months of the date of application;

b) Future rehabilitation of any branch line funded by Government should be carried out only if such rehabilitation is proven to be cost-effective;

c) No future rehabilitation, at Government expense shall be carried out unless the users (eg. shippers, elevator companies etc.) guarantee a level of usage acceptable to Government; and

d) No uneconomic branch line with no or marginal traffic (eg. five (5) carloads originating or terminating per branch line mile) shall be retained on the basis of future development requirements unless future developers are willing to guarantee a level of usage acceptable to the Commission.

5.0 OTHER CONSIDERATIONS

5.1 Rehabilitation Standards

5.1.1 General

The Terms of Reference for the Inquiry specifically requires us to "inquire into the current standards of rehabilitation of branch lines, under the federally-funded Prairie Branch Line Rehabilitation Program, giving special emphasis to options for selective rehabilitation of lines which could operate efficiently and adequately at different standards; the potential for providing expanded rehabilitation under those standards; and the feasibility of competitive tendering to ensure better value for money spent."

Branch lines become eligible for funding under the program if they are in the basic network and are grain dependent. Grain dependency is determined annually, pursuant to Section 40 of the Western Grain Transportation Act. This analysis indicates mileages which are both grain dependent and in the basic network. Other lines have become eligible as the program progressed, some of which have not been added to the program. Table 5.1 indicates the overall status of the program including lines eligible but not yet in the program.

TABLE 5.1

OVERALL STATUS OF PRAIRIE BRANCH LINE REHABILITATION PROGRAM

AS OF MARCH 31, 1985

Railway	Eligible Miles	Miles In Program	Miles Not In Program	No. of Miles Completed	% Complete (in terms of miles)
CN	3027.8	2488.9	538.9	1037.3	41.7
CP	3576.0	3167.0	409.0	1402.4	44.3
Totals	6603.8	5655.9	947.9	2439.7	43.1

There remain several considerations which are either part of the

specific terms of reference or which are isolated issues which arose from the evidence before us. For example, the rehabilitation program is very much dependent on the future of railway branch lines in Western Canada and its role should be allied with the overall policy objectives stated in Section 4.0. Government purchased grain hopper cars and the Churchill and Prince Rupert Interchanges are similarly related to the movement of grain and are considered to be significant issues herein.

Table 5.2 provides details on which branch lines are eligible but not in the rehabilitation program at present.

TABLE 5.2

DISPOSITION OF ELIGIBLE MILEAGE NOT IN THE PROGRAM

C.N.		C.P.	
Alliance	-59.2(1)	Acme	-27.3(3)
Arborfield	-19.4(3)	Altawan	-55.3(2)
Big River	-24.5(2)	Carman Spur	-15.0(4)
Blaine Lake	- 0.7(5)	Coronation	-62.9(2)
Bodo	-40.3(2)	Gretna	- 6.7(1)
Carlton	-27.8(2)	Kisbey	-37.0(2)
Central Butte	- 5.7(2)	Lac du Bonnet	-48.5(2)
Cudworth	- 1.8(2)	Langdon	-41.7(3)
Denay	-25.0(2)	Lomond	-14.9(4)
Dodsland	- 2.5(5)	McLeod	- 4.3(5)
Hartney	- 0.2(5)	Neudorf	- 2.5(5)
Lewvan	- 7.8(3)	Outlook	- 0.1(5)
Paddockwood	- 8.2(2)	Shamrock	-33.1(2)
Rossburn	-46.9(2)	Stirling	-20.6(2)
Stettler	-108.0(2)	Strathmore	-10.3(3)
Tisdale	-161.1(3)	Willingdon	- 4.2(5)
		Winnipeg Beach	-24.6(2)

(1) inclusion recommended
(2) segment or line requires further evaluation
(3) already meets standard
(4) low density line or segment
(5) tag end

5.1.2 Standards

Definition of Current Rehabilitation Standards

The final rehabilitation agreements define three standards of rehabilitation. They are as follows:

(a) Reconstruction or upgrading or both, to enable a line of railway to carry loaded freight cars with a minimum gross weight of 220,000 pounds, generally in year round operation and at a speed of 30 m.p.h.

(b) Reconstruction or upgrading or both, to enable a line of railway to carry loaded freight cars with a minimum gross weight of 263,000 pounds, generally in year round operation and at a speed of 30 m.p.h.

(c) Rehabilitation designed to improve the serviceability of the line.

It is significant that two of the current standards (220,000 and 263,000) are a specific load carrying capability standard (at 30 m.p.h.) whereas the "improve the serviceability" standard is not. Lines planned for rehabilitation to the latter standard will not be upgraded in terms of load carrying capability, only bettered at the present capability and speed.

The 220,000 pound standard, which has been the program objective, provides for the gross weight of a fully load aluminum grain hopper car and heretofor has required a minimum rail weight of 80 to 85 pounds per yard for 30 m.p.h. operations. The 263,000 pound standard provides for the gross weight of a fully loaded steel grain hopper car and heretofor has normally required a minimum rail weight of 100 pounds per yard for 30 m.p.h. operations. Rail weight of less than 80 pounds per yard on a line limits the load carrying capacity to 177,000 pounds gross car weight,

that of a box car fully loaded with grain, usually at speeds somewhat less than 30 m.p.h.

For the most part CP Rail branch lines, because they have 80 or 85 lb. rail, have a 220,000 pound capability. CN Rail branch lines, because they usually have 60 lb. rail, offer only a 177,000 pound capability prior to rehabilitation. Those lines which are planned to be rehabilitated to "improve the serviceability" standard will not be upgraded in terms of load carrying capability or speed, but will remain at their current level of standard.

Status of Rehabilitation Program with Respect to Standards

When the currently planned work is completed, 5512.5 miles of eligible prairie branch lines will have been rehabilitated. Using the mileages indicated in Table 5.3 the breakdown, in total, with respect to standard as defined in the present Final Agreements are:

177,000 lb. - 4.3%
220,000 lb. - 66.3%
263,000 lb. - 29.4%

TABLE 5.3

STATUS OF PRAIRIE BRANCH LINE REHABILITATION
PROGRAM WITH RESPECT TO STANDARDS
AS OF MARCH 31, 1985

Railway	Total Miles in Program	Miles Completed and Standard			Balance of Miles Proposed Standard		
		177	220	263	177	220	263
CN	2488.9	41.6	677.6	320.7	200.8	552.2	706.0
CP	3167.0	-	1055.3	134.3	-	1475.5	501.9
Totals	5655.9	41.6	1722.9	455.0	200.8	2027.7	1207.9

The above Table 5.3 indicates the 220,000 lb. and 263,000 lb.

standards at 30 m.p.h. as per the definitions in the current final agreements. It does not indicate those miles of 80/85 lb. track over which the railways may elect to haul loaded cars greater than 220,000 lb., and up to 263,000 lb. at speeds less than or possibly even at 30 m.p.h.

Two exhibits are found in Appendix 3, one of which shows the present status of lines in the program with respect to load rating irrespective of speed (Exhibit 1). The other map indicates the projected load rating of lines, again irrespective of speed, at the end of the program as it is now constituted (Exhibit 2).

Possible Alternate Standards

A dominant message, from grain companies, provincial governments and others, to this inquiry has consistently been that the target for branch line rehabilitation should be the 263,000 lb. gross car loading rather than 220,000 lb. We agree with this aim and we are aware that it was the objective as well sought by those who have negotiated the current rehabilitation agreements; however it has not been possible to achieve universally due to funding implications because the 263,000 lb. standard has been associated directly with the need for 100 lb. or greater rail weight (other aspects of the track structure being totally common to both the 220,000 lb. and 263,000 lb. standards).

The 263,000 lb. objective has been achieved much more readily on CN branch lines where unsuitable light rail has been replaced in large measure by 100 lb. rail and as a result the lines have been transformed from 177,000 lb. capacity line to 263,000 lb. capacity.

Because most CP lines have entered the rehabilitation program with 80/85 lb. rail, (which is adequate for 220,000 lb. operations) already in place, very little rail upgrading has taken place through branch line rehabilitation and therefore these lines have remained at the 220,000 lb. rating although train speed and reliability of the line has been enhanced.

However, in the recent past, a transition has been taking place whereby both railway companies are experimenting with carrying heavier loads on 80/85 lb. rail on otherwise fully rehabilitated track. In the case of C.P., 263,000 lb. gross weight cars are being moved on some lines, sometimes at reduced speed and in the case of CN 250,000 lb. gross carloads are being moved, also at reduced speed.

These increased operating standards are at the experimental stage only and the railways are not certain whether the results will permit an expansion of this practice to all 80/85 lb. lines. This development, of course, has substantial implications for the branch lines, particulary the CP branch line system where 80/85 lb. rail abounds. It would result in full steel hopper car utilization, even though at reduced speeds, which would be a worthy enhancement to the effectiveness of the overall branch line system.

The railways are to be commended for their efforts in pushing their branch line track structures to these higher levels of load carrying performance, thereby moving to the 263,000 lb. program objective that is so vigorously endorsed by everyone who has an interest in the performance of these lines.

Should this experiment by the railways succeed and the 80/85 lb. branch lines slated for full rehabilitation be redesignated to 250,000 or 263,000 lb. gross car weight capacity, then the face of the prairie branch line network after program completion would appear as shown in Exhibit 3, Appendix 3. This exhibit also displays those lines and line segments which this inquiry recommends for inclusion in the program in Section 4.4.1 of this report.

No further recommendations for alternative standards are considered necessary.

5.1.3 Specifications

A set of construction specifications are contained in each of the final agreements for each of the three standards:

1. The 263,000 lb. standard at 30 m.p.h.
2. The 220,000 lb. standard at 30 m.p.h., and
3. The serviceability improvement standard

In the case of the serviceability standard, CP Rail provides one specification entitled "Specifications to Improve the Serviceability", whereas CN Rail provides two specifications entitled "Specifications for Surfacing Ballast" and "Specifications for Drainage and Stabilization". Both railways provide a separate specification for the new construction for connections.

These specifications, accompanied by related drawings when required, describe quantitatively and qualitatively the requirements for construction that will provide a roadbed and track structure capable of carrying each of the three designated standards. The current specifications for each standard developed by the railways are consistent with good railway practice and generally appropriate for the standards. There are, however, some expected variances between the two railways for similar work as well as a need in certain areas for clarification and strengthened definition.

Potential Improvements to Specifications

The specifications for each standard contained in the current final agreements have been reviewed in detail to ensure that they appropriately describe, qualitatively and quantitatively the construction requirements for providing a roadbed and track structure to meet the standard.

For this review, consideration has been given to recommendations by our current Branch Line Rehabilitation inspectors, both in-house and in the

consulting engineering community and the opinions of other experienced railway personnel.

We conclude that the current specifications reflect sound railway engineering practice and are appropriate for the designated standards. The variances between specifications for a similar work item that exist between the two railways are not that significant in terms of the resultant quality of the work nor cost when carrying out the work. There have been very few problems in interpretation with the track structure specifications, i.e., ballast and ties, rail relay and final surfacing. This work is quite well defined by both railways, requiring a minimal "tightening-up" in quantitative terms.

The specifications for bridge repair and bankwidening and drainage require firming-up quantitatively. Some problems have been encountered in reaching agreement on the scope of required work for these work items. It is proposed to alleviate these type of problems by way of a prescribed policy for the preliminary inspection process which will include the preparation and submission of detailed work planning by the railway company.

Major improvements to the specifications are not required. They are appropriate for year round operation at the designated standard with the result that the lines are neither over rehabilitated nor under rehabilitated.

5.1.4 Selective Rehabilitation and Expanded Rehabilitation

General

A line by line review of all the branch lines eligible for rehabilitation was conducted to establish the relative importance of each line in the grain dependent branch line system.

The analysis took in the following factors:

1. Grain tonnages delivered to the line.

2. The estimated cost of remaining rehabilitation work.
3. Opportunities for segmental rehabilitation.
4. Alternative delivery options.
5. Consideration of the rehabilitation work already "sunken" into the line.
6. Present operating standard of the line (load capacity and speed).
7. Proposed operating standard (after rehab).
8. Opportunity for connections/joint running rights.
9. Opportunities for off-line elevators.
10. Grain company plans.
11. Suggestions received from railway companies, grain companies, provincial governments and others.

Generally, we found that the existing configuration of branch lines set out in the final rehabilitation agreements is solid and well thought out. Obviously it is the product of careful analysis and consultation. Submissions to us suggested relatively few changes to it.

One difficulty we did encounter was that of analyzing, in a detailed way, each branch line for specific rehabilitation needs. This results from the absence of information of the present mile-by-mile condition of the branch line which only becomes available after preliminary inspections are conducted; however these inspections don't take place until the fall before the work is carried out.

Generally speaking, we found little opportunity for further application of the "service improvement" standard on CN lines. That option is relatively more applicable to CP lines for the reason that the former lines will remain at the 177,000 lb. standard in most cases whereas the latter lines are already at the 220,000 lb. gross weight capacity.

We found a substantial number of lines where alternatives to the presently planned rehabilitation are possible and after further in-depth

examination may turn out to be feasible. The time available did not permit this further evaluation to be carried out before this writing.

A further group of eligible branch lines which are currently not in the rehabilitation program require further examination before a decision can be taken as to whether they should be placed in the program or not.

Finally, we have identified certain rehabilitation work which we think should be deleted from or added to the program.

Specifically the line by line analysis led us to recommend the following additions, deletions and further evaluations with respect to the contents of the Branch Line Rehabilitation Program. These recommendations will impact on the present estimated cost of the balance of the program; however we have not attempted to quantify that impact due to the fact that several recommendations will require further evaluation of costs. Moreover, the potential for further contracting has implications in that area.

Add to the Program

CP Gretna Subdivision from Altona to Gretna - full rehabilitation - 7.0 miles

CN Alliance Subdivision from Alliance to Alliance Jct. - full rehabilitation - 59.2 miles (except for work previously done between Alliance and Forestburg)

Delete from the Program

CP Outlook Subdivision - delete resurfacing from mile 2.3 to 20.2. This line already operates at 263,000 lbs. @ 35 m.p.h.

Defer Pending Further Examination of Need for Type and Extent of Rehabilitation Currently Planned

CP Russell Subdivision (Mileage 0.0 - 23.9) - pending decision on operations on the CN Rossburn Subd.

CP Reford Subdivision (Mileage 0.0 - 42.8)

CP Connection Fosston to Kelvington

CP Neudorf Subdivision (Mileage 53.2 - 126.2)

CP Macleod Subdivision (Mileage 33.0 - 105.3)

CP Kisbey Subdivision (Mileage 0.0 - 24.7)

CP Kerrobert Subdivision (East) (Mileage 0.0 - 10.0)

CP Empress Subdivision (Mileage 88.2 - 111.8)

CP Dunelm Subdivision (Mileage 0.0 - 25.2)

CP Colonsay Subdivision (Mileage 21.8 - 31.7)

CP Bassano Subdivision (Mileage 0.0 - 76.7)

CP Arcola Subdivision (Mileage 0.0 - 96.0)

CN Winnipegosis Subdivision (Mileage 0.0 - 11.0)

CN St. Rose Subdivision (Mileage 0.0 - 11.7)

CN Riverhurst/Central Butte Subdivision - location of connecting track

CN Rossburn Subdivision (Mileage 11.9 - 104.3)

CN Athabasca Subdivision (Mileage 31.5 - 93.1)

Further Evaluation Needed to Recommend Disposition

CP Altawan Subdivision (Mileage 66.8 - 122.1)

CP Winnipeg Beach Subdivision (Mileage 58.0 - 82.6)

CP Shamrock Subdivision (West) (Mileage 70.3 - 103.4)

CP Lac du Bonnet - (Mileage 6.0 to 34.8) and
(Mileage 44.8 to 65.7)

CP Stirling Subdivision - (Mileage 0.0 - 20.6)

CP Coronation Subdivision - (Mileage 22.8 - 84.2)

CN Bodo Subdivision - (Mileage 0.0 - 40.3)

CN Demay Subdivision - (Mileage 0.0 - 25.0)

CP Gravelbourg Subdivision - Hodgeville (mile 52.8) to Tyson (mile 57.3)

CN Gravelbourg Subdivision - (Mileage 47.5 - 51.7)

CN Stettler Subdivision (Mileage 0.0 - 108.0)

CN Paddockwood Subdivision (North) (Mileage 15.6 - 23.9)

CN Carlton Subdivision (Mileage 0.0 - 27.8)

CN Big River Subdivision (North) (Mileage 32.1 - 56.5)

CN Cudworth Subdivision (Mileage 84.6 - 86.4)

5.1.5 Competitive Tendering

Current Contracting Practices With Respect To Branch Line Rehabilitation

At present CP Rail contracts out some or all of the following activities:

1. Bankwidening and Drainage;
2. Ballast Crushing;
3. Supply of Materials and Services including:

    a. Ties
    b. Anchors
    c. Fuels and Lubricants
    d. Spikes
    e. Water in some areas
    f. Repairs to highway vehicles
    g. Bolts
    h. Bridge timbers
    i. Fabrication and supply of steel bridge bends
    j. Steel and timber piling
    k. Culverts
    l. Catering services
    m. And other related items

4. Repair or rebuilding of bridges; and
5. Resurfacing

The foregoing services and materials obtained through the tendering process comprises approximately 70% of the total rehabilitation expenditures incurred by CP Rail.

CN Rail currently contracts out the following work:

Rehabilitation Project	Type of Contract
Bankwidening, Drainage	Earth moving for bankwidening Culvert installations Fence construction Material hauling (Culverts, etc.) Misc. equipment rental Load pit run material for Bankwidening Haul work equipment
Ballast, Ties	Ballast supply preparation Crossing renewal rehabilitation Tie marking Tie unloading, hauling distribution Track material unload, haul distribution Catering Haul work equipment Haul camp trailers Supply haul water Haul fuel distribute Removal of scrap ties Pick-up haul unload scrap material Load Ballast Supply haul pit run gravel Garbage disposal Sewer, water, power hook-ups for camps
Rail Relay	Haul work equipment Haul camp trailers Supply haul water Transport employees Track material haul, unload distribute Sewer, water, power hook-ups for camps Pick-up material released from relays Load rail, other material (sold) Crossing improvements Garbage Disposal
Surface after Relay	Ballast supply preparation Ballast loading Haul work equipment Crossing improvement
Bridges	Rebuild, reinforce bridges including supply of material. Ballast supply preparation.

Rental of equipment

Rehabilitation Project	Type of Contract
Tie Plates	
Installation	Haul, distribute material Catering Haul camp trailers Pick-up released material Fuel haul, distribution Supply, water haul
Track	
Construction	Earthwork for grades Culvert installations Ballast supply, preparation Haul, distribute materials
Vegetation	
Control	Supply, apply chemicals
Transport Canada	
Signs	Supply, erect signs
Engineering,	
Supervision	Cost control System Leases - office, property Equipment rentals - misc.

The above includes items covered by formal contracts or agreements. It includes service type contracts only except in cases where material supply is noted. Material purchases done on tender or bid basis are not included.

In addition to the contracts listed, numerous services are obtained for small projects without benefit of a contract. This includes equipment repairs, rentals, purchases, transportation, meals, accommodations and emergency type requirements.

As well as the direct contracting covered in the foregoing, all material, supplies, tools and equipment are obtained by the railway through competitive or bidding processes. These would be:

	Description
Ballast and Ties	Track materials (O.T.M.) Supplies, tools, etc. Fuel Track Ties

	Description
Bankwidening Drainage	Supplies, tools, etc. Fuel Culvert
Rail Relay	Rail Other track material Supplies, tools, etc. Fuel Food supplies
Surface after Relay	Supplies, tools, etc. Fuel Food supplies
Bridges	Timber, track materials Supplies, tools, etc. Fuel
Tie Plate Installations	Other track material Supplies, tools, etc. Fuel
Track Construction	Other track material Rail Supplies, tools, etc. Fuel Food supplies Culvert Track Ties
Engineering, Related Items	Supplies, tools, misc. Fuel Total value of material purchased

In terms of the 1983 C.N. rehabilitation work program, for example, the above contracted materials and services represented 70.7% of the total project value that year.

Scope for Further Contracting

Both railways have expressed the view that there is little further opportunity or advantage to expanding the contracting practice any further because the current level is the optimum that can be achieved in terms of efficiency and cost-effectiveness while still satisfying the obligations in their respective collective bargaining agreements.

On the other hand railway contractors, from whom we have heard, are generally positive about being able to deliver a product of the same standard of quality as productively as is presently being achieved, if given the opportunity.

The areas where additional competitive tendering might be applied to the branch line rehabilitation program are as follows:

1. The installation of ballast and ties
2. The replacement of rail
3. Resurfacing operations

In the case of the ballast and tie operations, the work is now done completely by railway personnel in both railways. Similarly the hauling of ballast from the production stock pile to the work site is handled by the railway company's work trains.

In the case of rail replacement operations, the work of removing the existing light rail and replacing it with the heavy rail is performed entirely by railway forces. The delivery of the rail and fastenings and switches is handled by railway work trains.

Similarly in recent years all work associated with resurfacing is performed by railway forces and equipment. The ballast required for the surfacing lift is supplied by railway work trains.

The following sections go on to discuss the potential economies of expanded contracting in these three areas.

Contractor Availability

This inquiry has heard from several Canadian railway contractors both eastern and western-based. There are several large, well-established western Canadian railway contractors who would be capable of and extremely interested in competing for major branch line rehabilitation program work in the areas of ballast and ties, rail replacement and surfacing. These contractors by and large have substantial stocks of equipment on hand but because of the absence of any ballast and tie work in recent years they have not retained some of the costlier specialized work equipment required in these areas; however these contractors have indicated that in the event that substantial rehabilitation work became available for competitive tendering they could readily obtain the necessary equipment to carry out the work.

These contractors are of the view that their productivity could meet or exceed that of the railways if they were afforded track time equal to that which is afforded the railways' own forces. They point out that their productivity has been vulnerable in the past when railway supplied services such as work trains and material deliveries, have not occurred as planned.

In summary, it is evident that there is available to prairie branch line rehabilitation a pool of established railway contractors who could provide a competitive environment capable of carrying out most of the work operations remaining in the balance of the Branch Line Rehabilitation Program.

The Practicability of Expanded Contracting

In submissions received from both the railway contractors and the two railway companies, one common factor which is cited as a serious obstacle to further work being put out to competitive tender is that which is presented by the collective bargaining agreements. Generally speaking, the policy of the railways is to tender work out in the aforementioned areas of activity only in situations where the existing maintenance of way forces of the railways are already working to capacity and are therefore not able to take on the additional work. Railway contractors have not been able to negotiate an agreement with the Brotherhood of Maintenance of Way Employees which would allow the contractors undisputed access to railway right of way and therefore track work within the jurisdiction of the Brotherhood. In some cases contractors are signatories to the construction and general labourers agreements which permit them to engage in certain track work both on and off the railway property. Canadian Pacific has tendered out some resurfacing operations in Western Canada in recent years; however there appears to have been no major rail relay or tie and ballast project tendered since 1980.

It has been suggested to us that the unions are adamant that contracting out railway work should not increase and that this has been and continues to be an issue in negotiations between the railways and their unions. It has also been pointed out to us that even if this problem were to becomes soluble by means of a contractor hiring union members, then there would be no effective change to the scheduled working hourly rates now paid. The only cost reducing action available to a contractor in that case would be to improve on the efficiency of the present railway operation. The railways contend that because of their extensive experience over the years and the careful supervision applied to the work program, there would then be no savings in contracting out this work.

The view was also expressed to us that as the result of many decades of experience in construction, rehabilitation and maintenance of its lines the railways have developed the management, supervision, labour, equipment and expertise which would be difficult to duplicate and that there

is no pool of experienced skilled machine operators and supervisors available outside the railways which a contractor could engage even with premium wages.

It is further suggested that, in the area of materials purchasing, the contractor could not possibly duplicate the volume purchasing advantages and the other advantages of these railway companies. Similarly the contractor would incur higher transportation rates which would have to be negotiated from source to job site for various materials.

We have been made aware that there are certain restrictions presented by the collective agreements with respect to contracting out work. The time available has not permitted us to determine how these restrictions would apply if the federal government were to contract out that same work as opposed to the railways. There is a possibility that negative labour relations could develop and that such a step might have the effect of reducing employment on the railways.

Based on the remaining work described in the work programs forming part of the current rehabilitation agreements there is approximately $258.2 M worth of ballast and tie, rail relay and resurfacing work which could be subject to competitive tendering. The distribution according to work type is shown in the following section.

Potential Cost Savings

At this time, three prime work types are not contracted out by the Railway Companies: Ballast and Ties, Rail Relay and Final Surfacing. However, if the aforementioned restrictions associated with contractors working on-track could be overcome, competitive tenders could be invited for the labour, equipment and site supervision elements of these work types.

The railways normally contract out the ballast preparation. Logically, they should continue to procure, haul and distribute ballast, ties, rail and other track materials.

In order to identify potential cost savings, the 1986, 1987 and 1988 programs as they presently exist in the final agreements, (that is the balance of the program) have been considered with respect to Ballast and Ties, Rail Relay and Final Surfacing. Percentages of the estimated total values of these three work items have been developed in order to indicate the approximate value of the "contractable" work elements. These percentages are as follows:

Ballast and Ties - 40%
Rail Relay - 20%
Final Surfacing - 55%

Based on these percentages, the "contractable" work in the 1986, 1987 and 1988 programs that could be contracted out is:

Ballast & Ties -	0.4 x $111.8M	=	$44.7 M
Rail Relay -	0.2 x 133.5	=	$26.7 M
Final Surfacing -	0.55 x 12.8	=	$ 7.0 M
	Total		$78.4 M

Any potential cost savings by way of further contracting would come from this projected $78.4 M expenditure over the remaining years of the program.

This represents the projected cost component for labour, track-work equipment and site supervision currently contained in the final agreements, for both Railways, for the three work types being considered.

As to the degree of potential saving, consideration has been given to the known experience of the railway contractors, the probability of higher productivity due to the competitiveness in the tendering process and whatever related project cost histories were projected in the contractors' submissions.

There have been few, if any, major tie and ballast or rail relay projects tendered since 1980. There would therefore be an initial period of time during which the contractors would be progressing up to a rate of

production that would provide significant cost savings for these two work types. On the other hand, several surfacing programs (totalling approximately 600 miles) have been tendered in recent years. Final surfacing is, therefore, the work item that the contractors are presently likely most proficient at.

If it became practicable to call for competitive tenders for the labor, track-work equipment and site supervision elements of ballast and ties, rail relay and final surfacing, the saving through the remainder of the present program starting in 1986 could be expected to range as follows:

Ballast and ties -	5-10% of $44.7 M	=	$2.2 to $4.5 M
Rail Relay -	5-10% of $26.7 M	=	$1.3 to $2.7 M
Final Surfacing -	10-20% of $7.0 M	=	$0.7 to $1.4 M
In total	-		$4.2 to $8.6M

Potential cost savings when contracting out capital work can be identified at the time of the tender analysis. However, it must be realized that the expected savings are due to two prime factors; the competitive aspect of the process and related productivity assumed by the contractor when preparing the tender. For two of the work types being considered, ballast and ties and rail relay, productivity is particularly dependent on the railway companies' cooperation with respect to the procurement and distribution of required materials. If a low bidder were to assume full cooperation from the railway in the tender estimate and subsequently not get it, then delay claims would be expected. The cost of delay claims from contractors would, of course, detract from any savings anticipated by way of the tendering process.

Recommendations

There is significant remaining work in the Branch Line Rehabilitation Program which could be available for competitive tendering. Several contractors are available in western Canada who would be capable and interested in this work. Although the opinion has been expressed to us that there is little to be gained from pursuing further competitive tendering

there nonetheless remains the possibility that significant savings in expenditures over the balance of the program could be achieved by doing so. Apart from the restrictions to extended contracting presented by provisions in the current collective bargaining agreements, no other major obstacle would appear to stand in the way.

It is recommended that a deeper examination of the feasibility of expanded competitive tendering be conducted with a view to finding a compromise which would permit expanded contracting in the areas of ballast and ties, rail relay and resurfacing work; however because only three or four program years of work remain there is not a great deal of time to test out this feasibility. If further study shows that there could be a long delay in implementing expanded contracting then the potential for cost savings would be seriously undermined and probably render the objective relatively pointless.

It is suggested that the federal government immediately initiate further consultation among the railway companies, the railway unions involved and the railway contractors with a view to examining the feasibility of extended competitive tendering with either the railway company or the Government of Canada acting as the contracting authority.

5.1.6 Evaluation of Current Rehabilitation Agreements

Description

Both of the current rehabilitation agreements between Her Majesty and the railway companies, signed in May 1984, entail a fixed price to be paid by Her Majesty to each railway company in return for certain work operations to be performed over certain mileages on certain branch lines to specifications established for each of the branch line standards that is 220,000 at 30 m.p.h., 263,000 at 30 m.p.h. and service improvement.

This type of agreement is in sharp contrast to the first four rehabilitation agreements which were all framed on the basis of a recovery of direct costs incurred by the railways plus surcharges.

Advantages of the Current Agreements

There were solid reasons for moving to this type of agreement from the previous type. For example, no longer is there a need for laborious, contentious and expensive financial audits. The only monitoring that is required is that of engineering field inspections for the purposes of verifying scope and quality of work. Moreover the current agreements provided for a full 5-year program of work covering the balance of the program with the advantage that all who are directly concerned and interested know what work will be done and in what year.

Disadvantages

Based on experience gained over the past year in working with these final agreements, we have concluded that it is now somewhat difficult to link the price paid for the work, with the scope of work that is finally carried out. This is due to the fact that the fixed prices, contained in the agreement for the work programs extending to 1988, were negotiated on the basis of relatively broad estimates back in 1983/84. Because of the limited time that was available to negotiate the agreement, field inspections were not possible and therefore the detailed scope of work and line-by-line estimates for that work could not be established.

The 1984 estimates were based on historical rehabilitation program costs which include overheads and surcharges some of which are still the subject of disagreement between the federal government and the railways stemming from audits of earlier agreements. The agreements are quite rigid in terms of providing opportunities for changes to be made to work programs and for adjustments to the contract price which may result from findings of the preliminary inspections which take place annually before the work goes ahead. Experience in the program to date indicates very clearly that work programs

can frequently be subject to changes resulting from preliminary inspection results and sometimes from influences which are external to the rehabilitation program itself. The parties should expect this "fluidity" to continue until all preliminary inspections are carried out and until no further initiatives remain which have potential for impacting the configuration and longevity of grain dependent branch lines.

Another factor which has become evident over the past year is that some of the lines which were placed in the work programs in 1984 but for which the work is not scheduled until later in the program (1987 or 1988 say) may undergo certain changes which would affect the scope of work by the time it is carried out in 1987. For example some ties on the line may already have been changed out in the period 1984 to 1987 as a result of normalized maintenance operations. The present framework of the agreements does not recognize this potential for change in scope of work and in turn does not provide a mechanism by which the price paid for that work can be adjusted.

Recommendations

In order to enhance the current rehabilitation agreements, in a way which will permit the flexibility needed, it is suggested that negotiations between the parties to the agreements take place to seek revisions which will permit the currently planned work program contents and agreed values for that work to be confirmed or amended annually. This should be done following preliminary inspections and detailed engineering estimates prepared by the railway company concerned and agreed to by Her Majesty's inspector.

Preliminary inspections should be conducted jointly by Her Majesty's inspector and the appropriate railway personnel but only after the railway company has submitted to the inspector its detailed work plan for the line in question.

Following the joint inspection Her Majesty and the railway company should agree on a detailed work plan which sets out the scope of work necessary to bring the line up to the standard prescribed for it.

The railway company should submit a detailed engineering estimate to Her Majesty for concurrence. The estimate should contain an allowance for direct cost for material and labour and shall also include a reasonable contribution to overhead costs which reflects the incremental overhead costs incurred by the railway companies as a result of this program. In the event that the contracting option is available, Her Majesty may decide to obtain competitive tenders before a decision is taken to proceed.

Following acceptance of the estimate by Her Majesty the work programs and the agreed/deemed values in the agreement should be amended as required to reflect the agreed scope of work and the price to be paid for it.

By implementing the foregoing approach any uncertainty which now exists as to whether the payment for work reasonably matches the actual work done, will be removed.

5.2 The Economic Significance of Branch Line Rehabilitation

In addition to the operational subsidies provided under the WGTA for the movement of grain, two capital subsidies have been received by the railways. Since these subsidies are also related to transporting grain, they should be recognized as part of the total subsidy provided to the grain industry.

One of these capital subsidies is the rehabilitation program which the Federal Government began in 1977; the other is comprised of Federal and Provincial Government purchases of grain hopper cars. When weighing the costs and benefits of alternatives in light of present branch line operations, rehabilitation money (if any) already invested or planned on the branch line should be factors included in abandonment/retention decision.

Although the Hall Commission in 1977 recognized that the railways were being fully compensated for the movement of grain, the Federal Government embarked on a rehabilitation program to ensure that the Western Canadian branch lines would be sufficiently well maintained to continue servicing grain producers. The program has been ongoing since its inception — the permanency of which has, for the railways, institutionalized the program's right of existence. Although CP suggested a review to determine on which lines the rehabilitation subsidy should be spent, they also felt that the Government should be committed to providing funding for rehabilitation required in the future.

A total of $539 million out of $1,015 billion has been spent by government on branch line rehabilitation (but not necessarily all accounted for, as yet). This capital investment cannot be ignored in terms of its annual cost (for instance at 10% as the cost of capital) and could be considered to be the part of the total subsidies paid to the railways for branch line operations. Of the branch lines that have been rehabilitated, the minimum annualized cost ranges from 0.15 to 379.19 ¢/ton-mile but on average, on the rehabilitated lines, it is about 3.76 ¢/ton-mile. The total rehabilitation program represents about 0.3 ¢/ton-mile for all statutory

grain (assuming 31 billion ton-miles of traffic per year and 10% cost of money).

Under this program, roughly $369 million remains to be spent. For comparative purposes, the economic value of the pending rehabilitation projects is converted into $/ton, $/mile, and ¢/ton-mile and summarized below in Table 5.4

Table 5.4

SUMMARY ANALYSIS OF PENDING REHABILITATION COSTS

	CN	CP	TOTAL
Total miles of track to be rehabilitated	1,326.8	1,719.4	3,046.2
Total Capital Cost (000$)	221,412	137.750	359,162
Total Tons/Year (000s)	2,379.6	3,837.3	6,216.6
Average Annual Cost/Ton Estimate	9.30	3.59	5.78
Average Annual Cost/Mile Estimate	16,690	8,011	11,790
Maximum Ton-Miles (000s)	162,046.0	268,721.3	430,767.4
Minimum Annual Cost/Ton-Mile Estimate (¢/ton-mile)	13.66	5.13	8.34

Source: Western Division, CTC.

From this analysis, it can be seen that, irrespective of the current operating cost of the subject branch lines, the rehabilitation program will result in a minimum cost ranging from 0.48 to 172.05 ¢/ton-mile but, on the average, will be about 8-9 ¢/ton-mile — significantly more than the currently assessed WGTA rate of 2.5 ¢/ton-mile.

It may be true that rehabilitation will reduce operating costs in the future and that the net effect may result in a total cost saving in excess of the economic value of rehabilitation. If this is so, the rehabilitation is economically sensible, as long as the resultant cost is less than the cost of alternative systems. When considering the cost advantages of alternative feeder systems, the cost of pending rehabilitation should be considered as a branch line cost.

Parties commenting on this issue, however, seemed generally displeased with the rehabilitation program unless, of course, their particular segment was being rehabilitated. In this vein, the University of Manitoba and others suggested that it was more economic to upgrade some lines to hopper grade than to upgrade all lines to a lower standard. PNR contractors suggested establishing a pilot project using a boxcar and a half-loaded hopper in tandem and topping up the hopper at the main line junction point. They and others believe that this could provide an efficient system for branch line operation which would require little or no upgrading beyond 177,000 lb capacity although Manitoba Pool Elevators suggest that the cost of topping up would reduce available cost savings. Some of these parties also suggested that running loaded hoppers at lower speeds could also produce substantial savings as could the use of aluminum hoppers and other light-weight equipment.

Others held the contrary view that rehabilitation could be a complete waste of money since elevator closure and consolidation would tend to reduce branch line haulage and, thereby, greatly increase the unit cost of the remaining shipments. Of course, to the extent that consolidation has already occurred or that handlings are already extremely low, the expenditure of funds for rehabilitation purposes represents a misallocation of resources.

However, to the extent that rehabilitation is deemed to be an efficient utilization of resources, parties generally agreed that competitive bidding would be a worthwhile approach to the selection of a rehab/maintenance contractor. It was felt that this approach would result in a least cost outcome with respect to necessary upgrading. Although Alberta Wheat Pool suggested that safety and quality requirements would result in only limited savings at best, AWP stated, further, that under the WGTA, it is best if rehabilitation funds are spent on capital rather than maintenance so they won't be chargeable with the freight rates. However, the use of competitive bidding, at least by CP, appears to be the norm as follows:

> *"...where it is detemined that work can be contracted out, the policy adopted by Canadian Pacific is one of competitive tendering by invitation."*

With respect to the economic significance of the rehabilitation program we conclude:

a) Irrespective of the economic feasibility of retaining certain branch lines or segments thereof, those line sections which have been rehabilitated should be given preference to being retained over those high cost branch lines segments which have not been rehabilitated, whether or not plans for rehabilitation apply;

b) The total amount of future rehabilitation money should not be altered, but a review of where this money should be spent, should be conducted with the objective of maximizing cost effectiveness in consideration of the costs of alternate transportation options; and

c) Since the rehabilitation program is paid from the public purse, its net costs in ¢/ton-mile should be published annually on a branch line by branch line basis, including actual money spent and proposed future investment.

5.3 Government Grain Hopper Cars

Since 1972, the Federal Government has provided a direct capital subsidy to the main line carriers and the Prairie grain producers through the purchase of grain hopper cars. Saskatchewan and Alberta have also purchased grain hopper cars for the main line carriers. In total this subsidy equates to 17,120 Government purchased hopper cars for the railways at an estimated replacement value of about $1.12 billion (see Table 5.5 for details) assuming a cost of money at 10% the total economic value of the replacement cost is about 0.4 ¢/ton-mile.

Table 5.5

GOVERNMENT SUBSIDY THROUGH
GRAIN HOPPER CAR PURCHASE/LEASE
(since 1972)

A. PURCHASES	NUMBER OF CARS	PURCHASE PRICE ($000)	CURRENT* REPLACEMENT VALUE ($000)
1. Federal Government	13,120	590,600	860,672
2. Saskatchewan	1,000	unknown	65,600
3. Alberta	1,000	unknown	65,600
B. LEASES			
1. Federal Government	2,000	18,500/year	131,200
TOTAL	17,120	unknown	1,123,072

*Based on $65,600/car.

Source: Transport Canada, Grain Transport and Handling.

In respect of the economic significance of Government purchased grain hopper cars we conclude that whereas under the Crow Rate Regime capital assistance to the railways in the form of Government-purchased and/or leased grain hopper cars was warranted, under the WGTA such capital assistance is no longer justified.

5.4 Access to the Ports of Churchill and Prince Rupert

5.4.1 Port of Churchill

The Hall Commission addressed and investigated many facets of grain transportation during the course of its extensive inquiry from 1975 to 1977. One such question was the possibility of establishing an interchange between CN and CP so that grain traffic originating on CP rail lines closer to Churchill might be moved to that port via the Hudson Bay Route rather than the longer route to Thunder Bay or Vancouver.

At the request of the Hall Commission, CN and CP collaborated in a joint study as to the feasibility of establishing and operating several interchanges for grain traffic. The study concluded that a saving of only 104,000 loaded car miles per year would result which would not offset the additional costs to both railways, outweighing the value of car mile reduction achieved.

The CN/CP study was criticized by the Commission for several reasons:

1) A number of high volume CP subdivisions in close proximity to Churchill were not included.

2) The crop year chosen (1974-75) was not representative as only barley was shipped to Churchill that year.

3) The interchange points used in the study.

The Snavely Commission on the Costs of Transporting Grain by Rail, 1977, examined the railways' cost implications resulting from the establishment of a rail interchange agreement wherein it was assumed that grain destined for Churchill would have also originated on CP lines in the same geographic areas as the CN lines.

Using basically the data generated by the CN/CP joint study, the Snavely Commission concluded, in part, that:

> *"the establishment of an open interchange between CP rail and Canadian National for grain shipments destined to Churchill would have an insignificant impact on the costs and efficiency of the rail transportation services."*

1980 Churchill Interchange Agreement

In 1980 a temporary interchange agreement was established due to the shortage of suitable grain on the CN subdivisions which normally serve Churchill.

This was a one year agreement which allowed CN rail boxcars loaded at specific points on CP rail lines to be moved to the Port of Churchill. Five CP subdivisions in Saskatchewan were covered in the agreement. These were the Wynyard, Sutherland, Melfort, Lloydminster and Hardisty Subdivisions. For shipments off these subdivisions CP published Crownest base freight rates which did not include those in close proximity to Churchill.

It was the urgent need for grain to keep the Port of Churchill operational in 1980 that led to the establishment of the temporary interchange and not an effort to minimize loaded car miles.

Hudson Bay Railway Interchange Study

In 1981 the Western Division of the Canadian Transport Commission prepared an in-depth study extending the basic analysis performed by the CN/CP to an additional year (i.e., 1976/77) in which approximately 50% or more of the shipments were wheat and by insuring that all CP subdivisions which have a relative distance advantage vis-à-vis Churchill were included in the analysis.

The primary objective of this study was to estimate the value of car miles saved by interchanging and to compare this with the capital and operating costs incurred in an effort to ascertain the net advantages of establishing a permanent interchange. The CTC study concluded such an agreement could result in a modest reduction in loaded-car-miles. The magnitude of the reduction and consequent cost saving is primarily dependent upon the total volume and types of grain; in other words, it is not possible to ascertain the potential savings in an average year. A high percentage of

wheat would result in reductions at the high end of the range while a large proportion of barley would result in smaller reductions.

The Commission study further noted that the potential cost savings, which are sensitive to a number of variables are not high relative to the estimated capital cost incurred as the result of the interchange agreement. Under these circumstances, the proposed interchange agreement may not be economically viable.

One must bear in mind that both the CN/CP study and the subsequent Commission study, using data derived from the Snavely findings, were predicated on the use of the non-compensatory "Crow" freight rates. The use of today's remunerative grain freight rates would reflect a much more attractive revenue picture.

A CP/CN interchange agreement for the movement of grain through the Port of Churchill raises a number of operational considerations, which were discussed and analyzed in detail in the previously mentioned studies. These operational factors are not restricted solely to the rail aspect of such an undertaking. Producers, primary elevators, and the shippers would also be affected. These operational considerations should be viewed in the global sense, that is in the best interests of the grain gathering system as a whole with the advantages and disadvantages created by a an interchange agreement equally distributed among the various entities.

Producers

The Hall Commission stated that, to service Churchill, it was necessary for the Canadian Wheat Board to hold back callable grain on the farms, in rolling stock and in primary elevators on CN lines. This resulted in congestion in elevators and an inequitable application of delivery quotas pending opening of the Churchill shipping season.

It seems that a more equitable delivery opportunity would be realized if all producers in the Churchill tributary, that is, those

delivering to both CN and CP stations, had open to them the possibility of exporting their product through the Port of Churchill.

Primary Elevators

As stated earlier, holding back grain specifically for the Churchill movement has resulted in congestion in primary elevators along certain CN lines. Drawing some grain from CP lines within the area would ease this elevator congestion problem. The warehousing problem would be shared and, from an overall operational view point, be eased.

Canadian Wheat Board

The role assumed by the Canadian Wheat Board is extremely complex, riddled with intangible variables on both the market and supply sides. Wheat Board representatives have stated that, certainly, a permanent CN/CP interchange arrangement covering Churchill would be most welcome.

Such an agreement would afford the Wheat Board greater flexibility in meeting sales commitments through Churchill, especially important considering the extremely short shipping season. It should be noted that, subsequent to the temporary 1980 interchange agreement, the Wheat Board proposed that a permanent interchange agreement be established. Furthermore, the Canadian Wheat Board, the central agency responsible for the marketing of the major portion of Canadian grain abroad and the sole exporter of grain through Churchill, has stated that it favours and strongly endorses the publishing of grain freight rates from all railway stations in western Canada to all four western Canadian ports, i.e., Vancouver, Prince Rupert, Churchill and Thunder Bay. This, the Board believes, is necessary to afford it the freedom needed to enhance opportunities to better secure and service foreign markets in today's highly competitive environment.

Railways

It is recognized that the rail-related aspects of a permanent interchange agreement for Churchill would have to be addressed in terms of operations, coordination, equipment and infrastructure considerations. These issues are well known and would have to be resolved jointly by qualified railway and Wheat Board personnel who are intimately acquainted with the loading and handling of grain traffic, particularly with rail operations over CN's Herchemer and Thicket Subdivisions.

The issues relative to the establishing and implementing of such an interchange were undertaken with success in the 1980 temporary agreement. We are confident that the experience and knowledge gained from that exercise, coupled with a sincere effort by all parties, will result in a better arrangement on a permanent basis, especially considering the increasing revenues as provided by the Western Grain Transportation Act.

5.4.2 Port of Prince Rupert

A major area of concern, and a serious discrepancy in the current grain freight rate structure, is the absence of export grain rates from CPR origins to the Port of Prince Rupert. This becomes particularly significant with the recent opening of the new grain handling facility at Prince Rupert, capable of a 750 million bushels annual throughput. Other considerations are:

- the new compensatory WGTA rates;
- substantial subsidization of these rates by the federal government;
- the country's dependance on the Canadian Wheat Board and other exporters of grain to secure and service markets abroad in the most expedient manner;

- advantages to the Canadian Wheat Board and other exporters in exercising discretion in priorizing grain shipments through several west coast ports and maximizing its ability to fulfill commitments to Pacific rim markets;

- the current grain rates to Vancouver and Prince Rupert are equalized for grain from CN origins;

- rail mileages CN-Edmonton-Prince Rupert, and CN-Edmonton-Vancouver, are considered as equal for grain rate-making purposes (i.e., 765 miles);

- rail mileages to Vancouver via CN-Edmonton, and via CP-Calgary, are considered as equal for grain rate-making purposes (i.e., 765 miles);

- CN/CP have an internal agreement which permits grain originating on certain CP lines to move to Vancouver via Edmonton, thence CN, with CP receiving the revenue. Conversely, grain originating on certain CN lines moves to Vancouver via Calgary-CP, with revenue going to CN.

5.4.3 Observations

It is clear that since the McPherson Royal Commission (1961), and more notably since the Hall Commission (1977), there have been tremendous advances made in improving and modernizing Canada's grain gathering and transportation system. However, as is also apparent from the foregoing, there are still areas that can be improved upon, indeed, must be addressed and amended if we are to continue to provide the most efficient and economic grain handling system possible.

Some of the more significant observations are as follows:

- the lack of published rates from all stations to all ports, precludes the transport of export grain to the most beneficial cost/market-oriented port;

- previous studies indicated a modest saving in loaded car miles, notwithstanding data was derived from the Snavely Commission report. Snavely's findings were predicated on revenue contributed by the former "Crownest" rates, which have since been replaced by compensatory rates;

- the Wheat Board has stated it is essential there be unrestricted access to all four western Canadian ports. This is necessary if the Board and other exporters of Canadian grain are to attain the flexibility necessary to sell Canadian grain effectively in highly competitive foreign markets;

- additional costs involved in establishing a permanent interchange agreement should be more than offset by the resultant reduced hauls, and in particular the flexibility afforded the Wheat Board and other shippers;

- in certain years past, grain for Churchill has been drawn from as far away as CNR lines in northern Alberta and southern Manitoba, while grain on CP lines in proximity to Churchill continued to be delivered to Thunder Bay and Vancouver;

- there have been temporary interchange agreements in the past which have been found to be advantageous.

5.4.4 Recommendations

With respect to the Port of Prince Rupert it is recommended that, from all CP origins in western Canada covered by Canadian Freight Association Tariff No. 4310, CTC(F) 1032, the existing grain and grain products rates to Vancouver, B.C. also be published to apply to Prince Rupert, B.C. Routing of CP traffic destined to Prince Rupert should, in every instance, be via CP-Edmonton-CN.

With respect to the Port of Churchill it is recommended that, from all CP origins in western Canada covered by Canadian Freight Association Tariff No. 4310, CTC(F) 1032, grain and grain products rates also be established and published to Churchill, Manitoba. Such rates should be predicated on the existing Western Grain Transportation Act rate scale, using the shortest possible two-line mileages, from origin to destination. Shortest mileages are to be based on established railway interchanges, as well as on certain notional interchange points, to be established by the Canadian Transport Commission. Actual interchange points of traffic, or routings employed by the railways, as well as divisions of revenue, will be at the discretion of the rail carriers.

Enactment of the Western Grain Transportation Act and the substantial monetary commitment by the Federal Government has raised existing grain freight rates to a compensatory level. We believe that the grain transportation system should be viewed as a unit, with appropriate adjustments being made to remove certain inconsistencies until we do indeed have the most economical and efficient system. This is particularly true with respect to the inefficient cross hauling now required to serve the ports of Prince Rupert and Churchill solely from CN origins. Through the changes recommended above, benefits will accrue to the producers through lower overall rate levels, to the Wheat Board and other grain exporters through increased flexibility afforded by being able to utilize every western Canadian port, and finally to the citizens of Canada who are bearing a large part of the cost.

6.0 RECOMMENDATIONS

6.1 General

As noted in the introduction to this report, our recommendations center on the need to create a new set of mechanisms to deal with railway branch lines to improve feeder services, reduce their costs and otherwise better the transportation system efficiency to the benefit of the user and the public at large. Chapters 1 and 2 have outlined respectively the status quo and the potential for options to the conventional operation of railway branch lines. Chapter 3 evolved from those considerations, with the presentation of a series of mechanisms for improvement and conclusions with respect to a number of periferal issues. Chapter 4 presented our conclusions with respect to the required policy framework for branch lines and alternatives as a basis for legislative change. Chapter 5 described our conclusions with respect to a number of issues which require administrative rather than legislative change. Indeed, the reader of this report will recognize that the subject of this inquiry is a complex series of matters of wide scope and implications — something that does not lend itself to simple solutions. Our report is more a summary of conclusions rather than a structured reiteration of the volumes of submissions received and the knowledge gained from the many meetings we held. We nevertheless have the obligation to further simplify our results into an easily understood set of recommendations.

Our recommendations therefore take two forms: a) a recommendation to implement the policies outlined in Chapter 4; and b) a series of recommendations that require administrative changes that derive from various parts of the main body of the text of this report.

6.2 Policy Framework

The details of our recommended policy with respect to railway banch lines and alternative feeder systems such as short line railways, offline

elevators and trucking operations may be found in Chapter 4. In essence, we recommend the following:

a) Traditional railway branch line users should be made aware of the true costs of the operation and rehabilitation of the branch lines they use, on an annual basis, where such branch lines are directly or indirectly subsidized by Government and so should the public at large;

b) Government should assist users in the evaluation of the available options to conventional branch lines and the economic and physical implications related thereto, in the coordination of parties interested in alternative lower cost operations, and in the promotion and financial assistance for demonstration projects and technological feasibility tests of innovative equipment and operations related to alternative feeder services;

c) Interested parties, including shippers, short line railways, elevator companies and trucking companies, should be granted the right to apply for the diversion of subsidies, that would otherwise be paid to operate a conventional branch line, to an alternative transportation service that is lower in cost than the branch line operation;

d) The alternative feeder service that is subsidized should be subsidized so that the traditional branch line users pay no more for the service than if the branch line was operating;

e) The alternative feeder service subsidies should be based on costs incurred for movement of traffic that

would otherwise move and be subsidized on the branch line. Those costs should be based on movements only to the nearest remaining railhead delivery point. The subsidy per ton paid should at no time exceed the per ton subsidy paid for the conventional branch line operation at the time of the application for subsidy diversion indexed each year to account for average increases in all uneconomic branch line costs per ton;

f) Government should review the advisability of continuing to subsidize up to 10% of the highest unit cost branch lines (¢/ton-mile) each year, and for those seek alternative lower cost services;

g) In frontier regions where no branch line services exist and where delivery to railhead exceeds 50 miles and where an elevator company is willing to construct and operate a viable elevator, the trucking and incremental second elevation costs should be compensated under the provisions of the WGTA;

h) Branch line owners should continue to have the right to apply for abandonment and subsidy for imposed public duty and should otherwise be treated equally as with alternative feeder services;

i) All applications for abandonment or subsidy diversion should be decided within a maximum of six (6) months;

j) Future rehabilitation should only be carried out if it is cost-effective;

k) Retention of branch lines on the sole basis of impact on future development should only be granted on the basis of future guaranteed usage to an acceptable level.

l) Main line carrier owners of uneconomic branch lines should be encouraged to sell or otherwise exchange ownership with other main line carriers where such action yields a more efficient, cost-effective transportation system.

6.3 Branch Line Rehabilitation

With respect to branch line rehabilitation we recommend:

a) remaining funds in the rehabilitation program should be spent only on the basis of cost-effectiveness;

b) planned work program contents and agreed values for that work should be confirmed or amended annually following preliminary inspections and detailed engineering estimates prepared by the railway company concurred in by Government inspectors.

c) preliminary inspections should be conducted jointly by the Government inspector and the appropriate railway personnel but only after the railway company has submitted to the inspector its detailed work plan for the line in question;

d) following the joint inspection all parties should agree on a detailed work plan which sets out the scope of work necessary to bring the line up to the standard prescribed for it; and

e) the railway company should submit a detailed engineering estimate to Government for concurrence. The estimate should contain an allowance for direct cost for material and labour and shall also include a reasonable contribution to overhead costs which reflects the incremental overhead costs incurred by the railway companies as a result of this program Government may consider competitive tenders. In the event that the contracting option is available, Government may decide to obtain competitive tenders before a decision is taken to proceed.

6.4 Government Grain Hopper Cars

We recommend that the Federal Government no longer purchase and lease grain hopper cars.

6.5 Tourist Trains

We recommend that all aspects of Tourist train operations should be an operation under Provincial jurisdiction and not eligible for Federal transportation subsidies.

6.6 Churchill Interchange/Prince Rupert Interchange

With respect to the Port of Prince Rupert we recommend that, from all CP origins in Prairie Canada the existing grain and grain products rates to Vancouver, B.C. also be published to apply to Prince Rupert, B.C.

With respect to the Port of Churchill we recommend that, from all CP origins in Prairie Canada grain and grain products rates also be established and published to Churchill, Manitoba. Such rates should be predicated on the existing Western Grain Transportation Act rate scale, using the shortest possible two-line mileages, from origin to destination. Shortest mileages are to be based on established railway interchanges, as

well as on certain notional interchange points, to be established by the Canadian Transport Commission. Actual interchange points of traffic, or routings employed by the railways, as well as divisions of revenue, will be at the discretion of the rail carriers.

6.7 R-6313 Branch Line Costing Methodology

We recommend strongly that the Commission conduct a review within the next twelve months of the R-6313 branch line costing methodology to ensure:

a) the acceptability of the methodology from an accounting point of view;

b) the applicability of the methodology to branch line specific costing in the context of that costing reflecting the avoidable costs of branch line abandonment; and

c) any other matter relevant to the accuracy of the methodology.

6.8 Five Year Review

We recommend that the current five year review interval upon a decision to retain and subsidize a branch line should be retained as a guideline, however, the Commission should be permitted to extend same if special circumstances warrant.

6.9 Rehabilitation Constraint

Whether economically justified or not, a rehabilitation program has taken place on some Prairie branch lines, in part. That investment being made therefore we recommend those rehabilitated sections

of branch line not be subject to the subsidy diversion procedure until the year 2000.

6.10 Retention Without Operation

We recommend that in situations where the branch line parent applies for abandonment under existing legislation the Commission be permitted to require retention without operation until evidence of reasonable traffic levels is forthcoming. Subsidy for this imposed public duty should be restricted to minimum "mothballing" costs and that not exceed a period of five (5) years or a lesser time as the Commission may approve . Subsequently, abandonment should be automatic.

6.11 Construction of Branch Line Connections

We recommend that on its own initiative, the Commission be empowered to require by order the construction of connecting branch lines to be paid for by funds remaining under the Prairie Branch Line Rehabilitation Program, if such construction is shown to be cost effective.

6.12 Implementation

The implementation of these recommendations will require dedicated attention by a single body of the Commission. It is recommended that Offices of Alternative Rail Usage be established. One in the National Capital Region will have responsibility for lines in Eastern Canada, and one in the Western Division which will have responsibility for those lines in Western Canada. These offices will assist in the legislative drafting, regulatory and procedural rule drafting. They will subsequently to provide the necessary investigatory, coordination, hearing support and monitoring functions related to these new mechanisms.

6.13 Interim Measures

Many of the foregoing recommendations require legislative change to be accomplished. Prior to such change, those recommendations pertaining to grain-dependent branch lines could be processed through the use of the System Improvement Reserve Fund.

Signed by

_____
Commissioner J.M. McDonough
Chairman

_____
Commissioner R.J. Orange

_____
Commissioner D.H. Chapman

APPENDIX 1

SUBMISSIONS RECEIVED

SUBMITTED BY:	FROM:
Ville de Maniwaki	Maniwaki, Quebec
Association du Camionnage du Québec	Montreal, Quebec
Northwest Territories Motor Transport Assoc.	Yellowknife, N.W.T.
Traffic Gravel & By-Products	Brandon, Manitoba
Mrs. Gabrielle Rolland	Labelle, Quebec
Weekes Rail-Line Retention Committee	Norquay, Sask.
Red Deer Regional Planning Commission	Red Deer, Alberta
Mr. John Watson	Fort McMurray, Alberta
M.R.C. de La-Vallée-de-la-Gatineau	Gracefield Quebec
C.F.F.P.C. Les Entreprises Ferroviaires du Canada Inc.	Montreal, Quebec
University of British Columbia - Centre for Transportation Studies	Vancouver
Smiths Falls Railway Museum Association	Brockville, Ontario
Le P'tit Train Des Laurentides Inc.	Brossard, Quebec
Linke Agencies Ltd.	Kelvington, Sask.
Mr. L.H. Steeves	Riverview, N.B.
Conseil Régional de Développement Des Laurentides	Saint-Jérome, Quebec
Mr. Kenneth Showers	Victoria, B.C.
Big Beaver Railroad & Elevator Retention Committee	Big Beaver, Sask.
Lintlaw Chamber of Commerce and the Village of Lintlaw	Lintlaw, Sask.
Truax Rail Retention Committee	Avonlea, Sask.
Town of Stettler	Stettler, Alberta
John Gormley, M.P.	Ottawa, Ontario
Village of Paradise Valley	Paradise Valley, Alberta
Mr. John Obelnicki	Fisher Branch, Manitoba
GO NORTH COMMITTEE	Toronto, Ontario
Big River Wheat Pool Committee	Big River, Sask.
Department of Highways and Transportation, Government of Manitoba	Winnipeg, Manitoba
Manitoba Pool Elevators	Winnipeg, Manitoba
Mr. Robert O'Leary	Notre-Dame-Du-Lac, Quebec
Ministry of Transportation & Communications, Government of Ontario	Toronto, Ontario
Camrose Chamber of Commerce	Camrose, Alberta
Albert Cooper, M.P.	Ottawa, Ontario
Central Western Railway Corporation	South Edmonton, Alberta
Reward Wheat Pool Committee	Luseland, Sask.
Pacific Northern Rail Contractors	Langley, B.C.
Interlake Development Corporation Inc.	Arborg, Manitoba
Saskatchewan Wheat Pool Committee	Lintlaw, Sask.
Transport 2000 Atlantic	Kentville, N.S.
Amaranth Rail Retention Committee	Amaranth, Manitoba
Shamrock Rail Retention Committee	Shamrock, Sask.
Village of Coderre	Coderre, Sask.

Coderre Rail Retention Committee	Coderre, Sask.
Saskatchewan Wheat Pool Committee	Spring Valley, Sask.
Rural Municipality of Coulee, No. 136	Swift Current, Sask.
McMahon and District	McMahon, Sask.
Saskatchewan Wheat Pool Committee	Cando, Sask.
Chessie System Railroads	Cleveland, Ohio
Big River and District Board of Trade	Big River, Sask.
Valleyview Grain Transportation Action Committee	Valleyview, Alberta
Municipal District of Acadia Valley, No. 34 and Rail Retention Committee of Acadia Valley	Acadia Valley, Alberta
Alberta Wheat Pool	Calgary, Alberta
University of Manitoba - Transport Institute	Winnipeg, Manitoba
Fisher Branch Farm Business Group	Fisher Branch, Man.
Preeceville & District Chamber of Commerce	Preeceville, Sask.
McCain Foods Limited	Florenceville, N.B.
Department of Highways and Transportation, Government of Saskatchewan	Regina, Sask.
Mr. E.W. Hart	Winnipeg, Man.
Alberta Trucking Association	Calgary, Alberta
Preeceville-Kelvington Save-Our-Rail Committee	Lintlaw, Sask.
United Transportation Union	London, Ontario
Pioneer Grain Company Limited	Winnipeg, Man.
Canadian National Railway Company	Montreal, Quebec
Western Canadian Wheat Growers Association	Regina, Sask.
Shamrock Subdivision Rail Retention Committee	Shamrock, Sask.
Rossburn Subdivision Retention Committee	Rossburn, Man.
Rural Municipality of Big River	Big River, Sask.
Cargill Limited	Winnipeg, Man.
Canadian Pacific Limited	Montreal, Quebec
Felix Holtmann, M.P.	Ottawa, Ontario
Clayton, Sparks and Associates Limited	Saskatoon, Sask.
Town of Port Elgin	Port Elgin, Ont.
United Grain Growers Limited	Winnipeg, Man.
Saskatchewan Canola Growers Association	Saskatoon, Sask.
United Transportation Union, Local 1356	Regina, Sask.
Saskatchewan Wheat Pool	Regina, Sask.
Canadian Railway Labour Association	Ottawa, Ontario
Manitoba Pool Elevators, Sub-District 805	Riverton, Manitoba
National Farmers Union, Local 611	Saskatoon, Sask.
Davaar Delphic Company Limited	Regina, Sask.
Mr. Raymond Bernier	Fisher Branch, Man.
Alberta Economic Development Department, Government of Alberta	Edmonton, Alberta
Outaouais & Gatineau Valley Railway Committee	Hull, Quebec
National Farmers Union	Saskatoon, Sask.
Department of Transport of Quebec	Quebec, Quebec

APPENDIX 2

ORGANIZATIONS AND INDIVIDUALS WITH WHOM WE MET

Officials of the Dept. of Transportation & Highways, Province of British Columbia	Vancouver
B.C. Rail	Vancouver
B.C. Hydro	Vancouver
G. Gregory	Vancouver
Grain Transportation Agency	Winnipeg
Canadian Grain Commission	Winnipeg
Canadian Wheat Board	Winnipeg
C.P. Rail	Montreal & Winnipeg & Regina
C.N. Rail	Montreal & Winnipeg & Regina
Manitoba Pool Elevators Limited	Winnipeg & Regina
Pioneer Grain Limited	Winnipeg & Regina
United Grain Growers Limited	Winnipeg & Regina
Cargill Grain Company Limited	Winnipeg & Regina
Saskatchewan Wheat Pool	Regina
Alberta Wheat Pool	Calgary & Regina
University of Manitoba, Transportation Centre	Winnipeg
Officials of the Ministry of Transportation and Communications, Province of Ontario	Toronto
Hon. G. Tardif and Officials of the Dept. of Transport Province of Quebec	Quebec City
Officials of the Dept. of Transport, Province of Nova Scotia	Halifax
Officials of the Dept. of Transportation, Province of New Brunswick	Fredericton
Officials of the Dept. of Transportation, Province of Newfoundland	St. John's
Officials of the Dept. of Transport, Province of Prince Edward Island	Charlottetown
Hon. James Garner and Officials of the Dept. of Highways & Transportation, Province of Saskatchewan	Regina
Hon. John Plohman and Officials of the Dept. of Highways and Transportation, Province of Manitoba	Winnipeg & Regina
Officials of the Department of Economic Development, Province of Alberta	Edmonton & Regina
Central Western Railways	Edmonton & Saskatoon
Grain Producers and others - Rossburn Subdivision	Winnipeg & Minnedosa
Grain Producers and others - Alliance Subdivision	Forrestburg, Alta.
Grain Producers and others - Big River Subdivision	Big River, Sask.
Grain Producers and others Paddockwood Subdivision	Paddockwood, Sask.
Grain Producers - Colonsay Subdivision	Saskatoon, Sask.
Grain Producers - Carlton Subdivision	Saskatoon, Sask.
Association of American Railroads	Washington, D.C., U.S.A.
American Short Line Railroad Association	Washington, D.C., U.S.A.
Mr. Allan Soccea, General Manager, Belfast and Moosehead Railroad	Belfast, Maine, U.S.A.
Mr. Bryan Whipple, President, Eureka Southern Railroad Company	Eureka, California, U.S.A.
National Farmer's Union - Local 611	Saskatoon, Sask.

Manager, Town of Maniwaki	Hull
Outaouais and Outaouais Gatineau Valley Railway Committee	Hull
Transport 2000	Hull

APPENDIX 3

CANADIAN TRANSPORT COMMISSION

WESTERN DIVISION

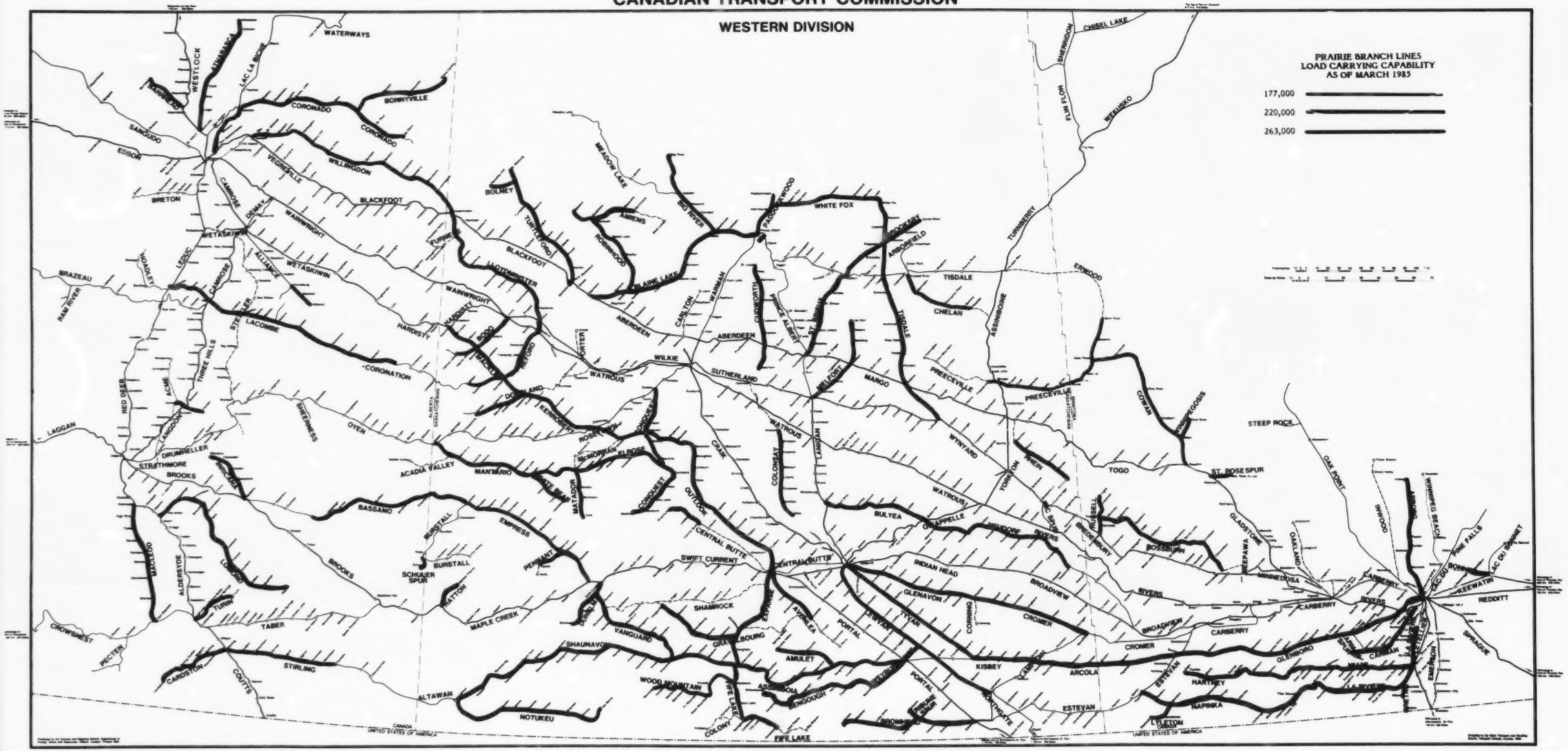


EXHIBIT 1

CANADIAN TRANSPORT COMMISSION

WESTERN DIVISION

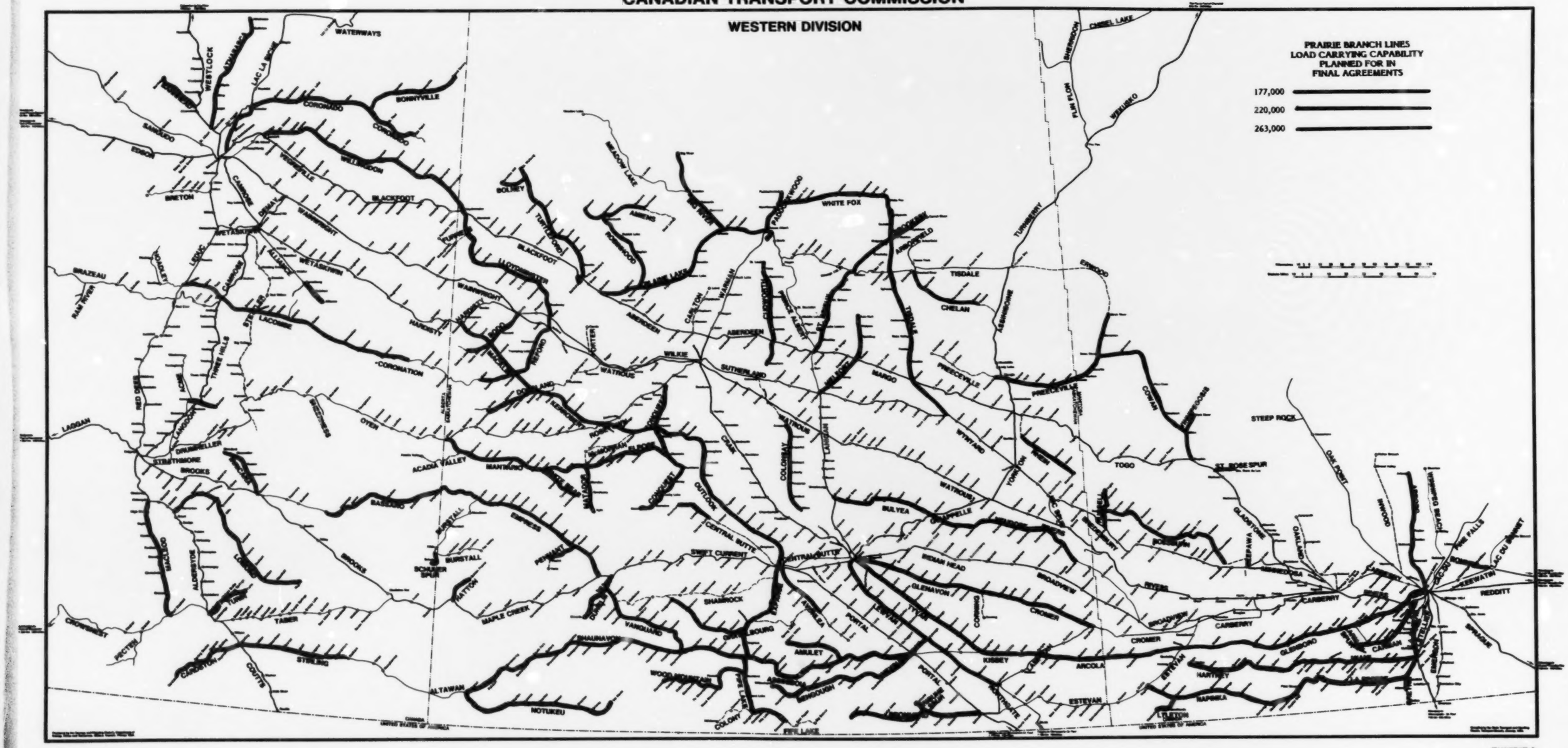


EXHIBIT 2

CANADIAN TRANSPORT COMMISSION

WESTERN DIVISION

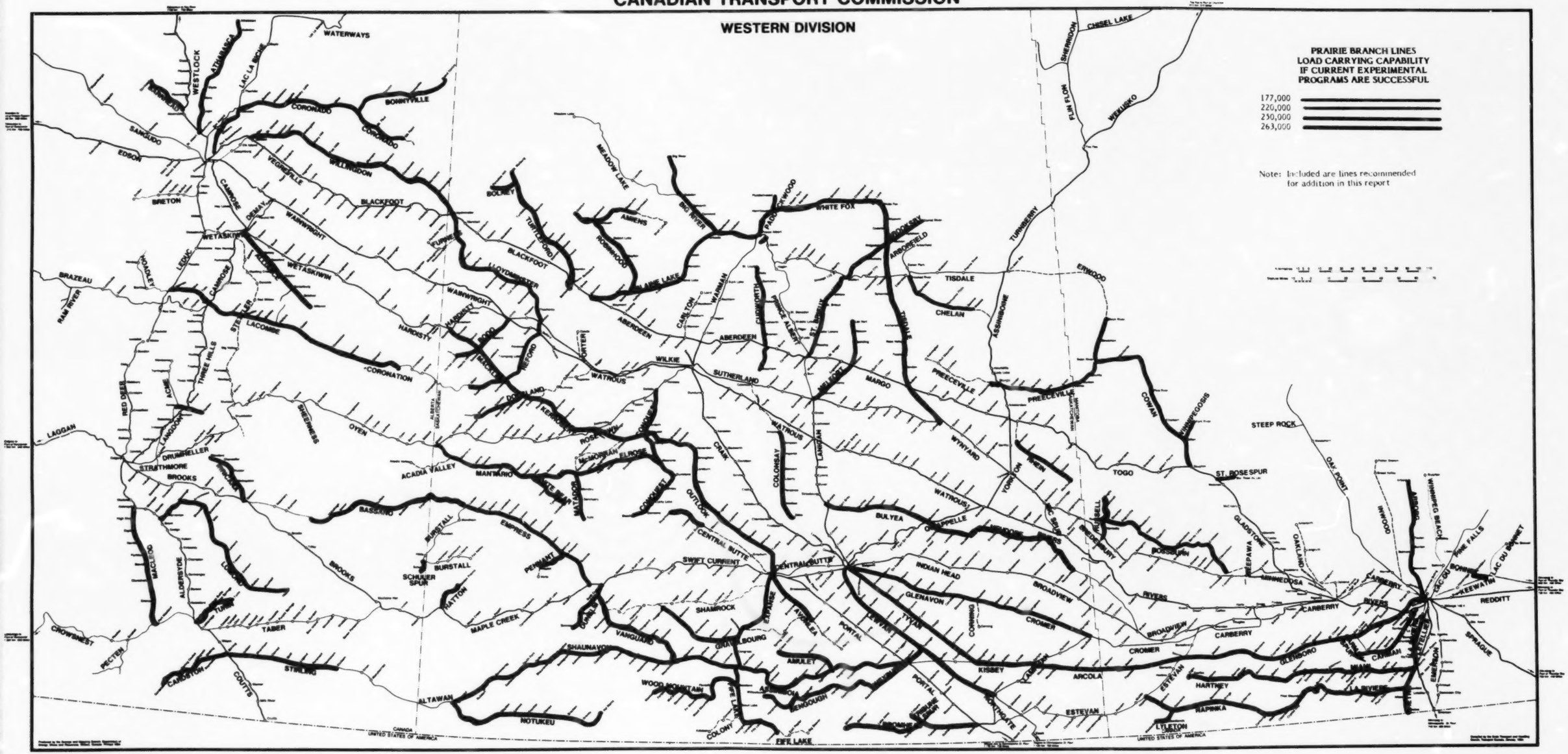


EXHIBIT 3